



Work Locus of Control and Perceptions of Practice

Charity Samantha Fitzgerald & Sherrill Clark

To cite this article: Charity Samantha Fitzgerald & Sherrill Clark (2013) Work Locus of Control and Perceptions of Practice, *Journal of Public Child Welfare*, 7:1, 59-78, DOI: [10.1080/15548732.2012.738185](https://doi.org/10.1080/15548732.2012.738185)

To link to this article: <http://dx.doi.org/10.1080/15548732.2012.738185>



Published online: 14 Feb 2013.



Submit your article to this journal [↗](#)



Article views: 90



View related articles [↗](#)

Work Locus of Control and Perceptions of Practice

CHARITY SAMANTHA FITZGERALD and SHERRILL CLARK
University of California at Berkeley, Berkeley, CA, USA

The literature suggests that perceptions of practice likely differ between workers with an external work locus of control (WLOC) and those with an internal WLOC. It was hypothesized that workers with an external WLOC are less likely to perceive that they positively influence clients, take less responsibility for client outcomes, feel less successful, place less importance on success in employment decisions, and have less confidence in their knowledge and skills than those with an internal WLOC. Statistical models using logistic regression confirmed these hypotheses except for confidence in knowledge and skills, which showed no relationship with WLOC.

KEYWORDS *work locus of control, public child welfare, work-force development*

Locus of control refers to the degree to which people feel that an outcome of their behavior is a result of their personal initiative as opposed to external conditions. Specifically, those with an external locus of control believe that an outcome is the result of chance, fate, or others' decisions, and those with an internal locus of control believe that an outcome is a result of their own actions (Rotter, 1990). Locus of control, a personality variable, is grounded in social learning theory, which asserts that reinforcement fortifies the expectation that a particular behavior will lead to that reinforcement (Muhonen & Torkelson, 2004; Bandura, 1977b). Conversely, once a link has been established between a behavior and an expectation, the absence of reinforcement can terminate that expectation (Strauser, Ketz, & Keim, 2002). Expectations can be transposed from one context to others that are perceived

Received: 10/15/11; revised: 08/03/12; accepted: 08/17/12

Address correspondence to Charity Samantha Fitzgerald, 120 Haviland Hall #7400, School of Social Welfare, University of California at Berkeley, Berkeley, CA 94720-7400, USA. E-mail: s-fitzgerald@berkeley.edu

as being similar (Strauser et al., 2002). Rotter (1966) is largely credited for having disseminated the use of the locus of control variable with the Internal-External Scale, and the variable has been translated for specific domains, such as health and work, the latter of which is the focus of this article.

Paul Spector modified Rotter's construct to be especially relevant to a work setting. Spector (1988) argued that a locus of control scale that focused specifically on the work domain would have stronger relationships with work-specific variables than a generalized locus of control scale, and others have concurred (Blau, 1993; Muhonen & Torkelson, 2004). Individuals with an external work locus of control (WLOC)¹ think that they have little control over events and circumstances in the workplace, such as promotions and career advancement (Oliver, Jose, & Brough, 2006). On the other hand, individuals with an internal WLOC² believe that they are responsible for their achievements and their failures in the workplace and that they can control their surroundings (Oliver et al., 2006). Based on social learning theory, individuals with an external WLOC are not as likely to respond to reinforcement contingencies as individuals with an internal WLOC. Additionally, Spector (1982) posited that one's WLOC might vary over time. That is, WLOC may affect behavior, the outcomes of which may affect WLOC. Thus, WLOC and the consequences of actions might engage dialogically so as to influence the other over time.

Public child welfare workers are often caught between the dual conflicting roles of (a) enforcing child protection and safety, and (b) obtaining resources for families who might otherwise be in the child welfare system due to neglect or abuse. Public resources seem to be increasingly scarce, and agencies are underfunded. Burnout is an ever-present hazard of this work. The environment is very stressful, and worker turnover is a constant problem. In this context, public child welfare social workers must interpret and implement policy unobserved through what Michael Lipsky (1980) termed *street-level bureaucracy*, yet the agency context of the field is legalistic and highly regulated.

Until the start of the Title IV-E program in California, the academic community had avoided public social services as a learning venue because of the stereotypical view of public services: They were perceived to be rule-bound, inflexible, and actually deleterious to the clients they were intended to serve. Few social work students had field placements in public agencies. The purpose of the Title IV-E program was to professionalize public child welfare services by educating and training public child welfare social workers to have the values, the knowledge, and the skills to cope with the duality of roles and to make reflexive, informed, and ethical street-level decisions. The specially educated workers would transform the system from the inside out by applying the values, the knowledge, and the skills acquired in graduate school. To effect this transformation, the specially educated workers would have to remain employed at the public child welfare agencies.

The California Social Work Education Center (CalSWEC) began investigating the WLOC construct as part of the evaluation of the Title IV-E program in California. WLOC seemed to be a construct worthy of investigation because some workers persisted, even thrived, in the face of very stressful jobs by setting and accomplishing their career goals, by achieving what they defined as successful outcomes in conjunction with clients, and by seeking out and creating opportunities for growth and development. Thus, CalSWEC wanted to know if graduate school could engender the behaviors and attitudes associated with an internal WLOC (discussed subsequently in the literature review) so that specially educated social workers could transform public child welfare services. CalSWEC wanted to understand the challenges and the opportunities that innovative, skilled workers experience in public child welfare services. Moreover, CalSWEC wanted to understand how workers with an external WLOC experience bureaucratic systems and which job designs, job roles, and job responsibilities can encourage those with an external WLOC to engage in both self- and organizational development.

This article reports on a segment of a larger study on public child welfare worker retention (Benton, 2010). In the larger study, those who stayed in child welfare differed significantly from those who left upon completion of their work obligation based on certain worker characteristics. Being of mixed ethnicity, of cohort membership, and from previous county employment predicted retention. In addition to worker characteristics, at least one variable from each of the following categories predicted retention: extrinsic job factors (i.e., salary, hours, and supervisor support); intrinsic job factors (i.e., level of success); and response-to-job factors (i.e., client-related stress). One worker characteristic (i.e., cohort) and two response-to-job factors (i.e., burnout-emotional exhaustion and visit-related stress) were significantly associated with leaving. In telephone interviews, some interviewees who had chosen to stay in public child welfare expressed the characteristics associated with an internal locus of control, such as finding satisfaction in work with clients, managing stress, and seeking out opportunities for growth and development. To summarize, the larger evaluation showed correlations among job satisfaction, job stress, and retention. The literature, too, indicates that WLOC is related to job satisfaction, job stress, and intentions to quit (discussed in following text). Thus, examining WLOC in the public child welfare context seemed to hold promise in terms of understanding the mechanisms among job satisfaction, job stress, and retention.

LITERATURE REVIEW

Given its potential to elucidate relationships among job satisfaction, job stress, and retention, it is surprising that there is a paucity of research on

WLOC in the social work literature, especially the public child welfare literature wherein innovative and skilled workers contend with bureaucratic structures. In fact, a literature review in August 2010 for the term *work locus of control* in three major social work databases (i.e., Family and Society Studies Worldwide, Social Work Abstracts, and Social Services Abstracts) revealed only one pertinent journal article on the construct (see Orpen, 1991). In other fields, however, is more literature surrounding the WLOC, which shaped this study's hypotheses.

The locus of control construct's significance in the workplace stems from the hypotheses that where one locates a sense of control might impact job motivation, job performance, job satisfaction, turnover, and leadership style (Macan, 1996). In a comprehensive and rigorous meta-analysis of locus of control at work, Ng, Sorensen, and Eby (2006) confirmed these hypotheses. They found negative correlations between external locus of control and the following conditions: general well-being, job satisfaction, commitment to work, job motivation, performance and success, favorable task experiences, favorable social experiences, and problem-focused coping. Among all these variables, well-being and job satisfaction demonstrated the largest absolute effect sizes (Ng et al., 2006). In fact, a cross-national study found that an external WLOC is negatively linked with well-being irrespective of whether the nation is classified as individualist or collectivist (Spector, 2001).

In addition to the aforementioned studies that illuminate locus of control's strong relationship with well-being in a work setting, additional studies illustrate locus of control's relationship with various work behaviors and attitudes. Workers with an external locus of control exhibit compliant performance whereas workers with an internal locus of control exhibit initiative performance (Blau, 1993). Those with an external locus of control are less likely to engage in strategies to influence their managers than those with an internal one, and they report a lower quality relationship with their managers than those with an internal locus of control (Martin, Thomas, Charles, Epitropaki, & McNamara, 2005). An external locus of control is also correlated with one component of burnout: a reduced sense of personal accomplishment (Fuqua & Couture, 1986). Workers with an external locus of control are also less interested in self-development than those with an internal one (Blau, 1993). The correlation between stress and strain is higher for those with an external WLOC than those with an internal WLOC (Siu & Cooper, 1998). Finally, having an external WLOC is positively correlated with the intentions to quit (Siu & Cooper, 1998).

At this point the relationship between the concepts *self-efficacy* and *locus of control* should be explained. Self-efficacy is the belief that someone has the skills from which to draw in order to accomplish something (Bandura, 1997; Spector, 1998); locus of control is the belief in principle that behavior can influence outcomes. Self-efficacy can provide the motivation to act whereas locus of control concerns the belief that one's actions can bring

about outcomes. Although self-efficacy (Bandura, 1977a, 1997) and locus of control are related, research shows that they are not the same construct (Meier, Semmer, Elfering & Jacobshagen, 2008; Ng et al., 2006; Ajzen, 2002). In the public child welfare context, self-efficacy relates to perceived job readiness; WLOC has to do with what happens in the job environment (i.e., initiative or compliant performance).

In sum, the literature suggests that locus of control in a work setting is likely to be related to one's satisfaction, well-being, behavior, and attitudes. The examination of WLOC has informed job design and job training in other fields. The field of public child welfare, too, can benefit from exploring the WLOC construct as it relates to perceptions, attitudes, and approaches to practice in order to best support public child welfare workers, to inform job design, and ultimately to provide optimal services to children, youth, families, and communities.

RESEARCH QUESTIONS AND HYPOTHESES

The question this article addresses is whether there is a correlation between WLOC and the following attitudes towards public child welfare practice: perception of ability to influence clients, perception of personal responsibility for clients' welfare, perception of success, importance of success in employment decisions, and perception of professional knowledge and skills to accomplish goals. Although public child welfare workers were excluded from the samples in the preceding studies, those with an external locus of control and those with an internal locus of control across work fields tend to exhibit clear and consistent patterns with respect to satisfaction, well-being, behavior, and attitudes. Thus, following the logic of the literature review above, the authors developed the following hypotheses:

1. *Public child welfare workers who are externally oriented are less likely to report the ability to positively influence clients than those who are internally oriented.* Those with an external WLOC are less likely than those with an internal WLOC to believe that their actions lead to anticipated outcomes. Thus, it can be reasonably expected that externally oriented social workers would be less likely to believe that their practice matters and leads to desired outcomes for clients than internally oriented social workers.
2. *Public child welfare workers with an external WLOC are less likely to report having responsibility for clients' welfare than those with an internal WLOC.* The literature suggests that those with an external WLOC are likely to attribute clients' outcomes to chance or fate rather than to their own action. Thus, they are less likely to report having responsibility for clients' outcomes than those with an internal WLOC.

3. *Public child welfare workers with an external WLOC are less likely to perceive that they are successful in accomplishing their goals than those with an internal WLOC.* Individuals with an external WLOC might be more likely to perceive helplessness, and, thus, they would give up. In contrast, individuals with an internal WLOC might persist in the face of adversity. Thus, workers with an external WLOC are less likely to feel successful than those with an internal WLOC.
4. *Public child welfare workers with an external WLOC are less likely to place importance on success in determining whether they remain in their jobs than those with an internal WLOC.* Those with an external WLOC are less likely to leave jobs where they feel unsatisfied or unsuccessful because of the perception of a lack of other opportunities. Those with an internal WLOC, on the other hand, are likely to seek out jobs that meet their need for feeling self-efficacious. Thus, it can be inferred that those with an external WLOC are less likely to weigh their feelings of success in determining whether to remain in a position than those with an internal WLOC.
5. *Public child welfare workers with an external WLOC are less likely to perceive that they have the necessary professional knowledge and skills to accomplish goals than those with an internal WLOC.* Since those with an external WLOC are less likely to believe that their practice will bring about desired outcomes, a repertoire of knowledge and skills is likely to be of less importance to them than to those with an internal WLOC. Thus, they might have lesser perceptions of their professional repertoire than those with an internal WLOC.

METHODOLOGY

Sample and Data Collection Procedures

The data used for this analysis were collected by CalSWEC in a cross-sectional survey research design. CalSWEC has issued the survey used to generate information about retention and turnover among specially trained (Title IV-E-supported) public child welfare workers since 1996. Six to 12 months after completion of two-year work obligations, all CalSWEC Title IV-E stipend recipients are asked to complete the survey in either a paper- or a web-based format. Thus, respondents have completed 2.5 to 3 years of work in public child welfare when completing the survey. Though CalSWEC has issued the survey since 1996, it was not until 2006 that the questions regarding WLOC were included on the survey. Between 2006 and 2009, the survey was mailed to 551 eligibles, of whom 263 (48%) responded. In a previous analysis of this survey data, Jacquet, Clark, Morazes, and Withers (2007) determined that of race/ethnicity, gender, year of enrollment in school, and concurrent

student/county employee status, the only significant difference between responders and non-responders related to race/ethnicity. Additionally, Jacquet, and colleagues discovered that more non-responders left their agencies upon completion of their work obligation than respondents.

Measures

This study looks at responses to five single-item questions as outcome variables. Although each of these five variables as a stand-alone outcome might elucidate little about public child welfare practice, as a collection they paint a broad picture of practice perceptions. The outcome variables were constructed based on previous years' statistically significant results from the larger retention study (see Benton, 2010; Morazes, Benton, Clark, & Jacquet, 2010). That is, social workers who felt they could influence clients, who took personal responsibility for client outcomes, who felt they were successful with clients, to whom success was important, and who felt they had the requisite knowledge and skills were likely to stay in public child welfare. The prime explanatory variable is WLOC, specifically Paul Spector's (1988) Work Locus of Control Scale, which entails rating 16 items on a 6-point Likert-type scale. This scale has been applied to national and international samples. The article also considers additional variables to be used as controls.

OUTCOME VARIABLES

The outcome variable *influence clients* was created from responses to the following question: *How much influence do you believe you personally have to positively affect the clients you serve?* Survey respondents could choose one of four options: (1) no influence, (2) a little influence, (3) usually some influence, and (4) much influence. These four options were collapsed into a dichotomous variable, *low influence* and *high influence*. In this sample, 51 (19.4%) reported having low influence and 200 (76.0%) reported having high influence with 12 missing values.

The outcome variable *personal responsibility* was created from responses to the following question: *When you consider the clients you serve as a child welfare employee, how much personal responsibility do you believe you have over their general well-being and quality of life?* Survey respondents could choose one of four options: (1) no responsibility, (2) some responsibility, (3) quite a bit of responsibility, and (4) a large amount of responsibility. Again, these four options were collapsed into a dichotomous variable, *limited responsibility* and *substantial responsibility*. In this sample, 146 (55.5%) reported having limited responsibility and 104 (39.5%) reported having substantial responsibility with 13 missing values.

The outcome variable *success* was created from responses to the following question: *How would you describe the success you have in accomplishing*

objectives and goals for the clients you serve? Survey respondents could choose one of four options: (1) no success, (2) a little success, (3) usually some success, and (4) a high degree of success. Yet again, these four options were collapsed into a dichotomous variable, *low success* and *high success*. In this sample, 53 (20.1%) reported having low success and 198 (75.3%) reported having high success with 12 missing values.

The outcome variable *importance of success* was created from responses to the following question: *How important is your personal success in your professional work with clients in determining whether you will remain employed with public child welfare services in the future?* Survey respondents could choose one of four options: (1) not important, (2) somewhat important, (3) important, and (4) highly important. These four options were collapsed into a dichotomous variable, *minimal importance* and *significant importance*. In this sample, 99 (37.6%) reported that success has minimal importance and 152 (57.8%) reported that success has significant importance with 12 missing values.

The outcome variable *knowledge and skills* was created from responses to the following question: *How would you rate the professional knowledge and skills you possess for the accomplishment of positive outcomes with the clients you serve?* Survey respondents could choose one of four options: (1) typically inadequate, (2) somewhat inadequate, (3) typically adequate, and (4) highly adequate. Again, these four options were collapsed into a dichotomous variable, *inadequate* and *adequate*. In this sample, 12 (4.6%) reported having inadequate knowledge and skills, and 239 (90.9%) reported having adequate knowledge and skills with 12 missing values.

EXPLANATORY VARIABLE

WLOC is the chief explanatory variable. To determine whether a locus of control is external or internal, Spector (1988) created a 16-item survey scored on a 1 to 6 scale. Respondents are asked to mark whether they disagree very much, disagree moderately, disagree slightly, agree slightly, agree moderately, or agree very much with statements such as *A job is what you make of it* and *It takes a lot of luck to be an outstanding employee on most jobs* (see shell.cas.usf.edu/~pspector/scales/wlcsnice.doc for all items). Eight items are scored in a straightforward manner, and eight items are reverse scored. Scores can range from 16 units to 96 units. The mean score in the United States, according to Spector (2004), is 40.0 units with a standard deviation of 9.9 units. A high WLOC score indicates an external orientation; a low score, an internal orientation. In a study across six samples, the WLOC scale was found to have a coefficient α of .85 for four samples, .80 for one sample, and .75 for the other sample (Spector, 1988). The coefficient α for the sample in this study was .81. Spector et al. (2002) cite validation evidence for the scale by noting that the WLOC scale was found to correlate as expected with job satisfaction, control at work, role stress, and perceptions of supervisor style.

TABLE 1 Race and Gender of Sample Respondents

Race	Gender		Total
	Male	Female	
White	15	92	107
African American	4	24	28
Other/mixed	4	24	28
Asian American	3	24	27
Latino	8	54	62
Unreported	0	11	11
Total	34	229	263

Not all respondents in this study answered all items in the 16-item survey. The researchers imputed the mean score for each line item to replace missing values (Vach & Blettner, 2005). In this sample, the mean was 39.8 with a standard deviation of 9.3 units. WLOC was treated as both an unordered categorical variable and as a continuous linear variable, depending on whether the assumption of linearity could be accommodated by the model.

CONTROL VARIABLES

The researchers also examined the relevance of two other independent variables: *gender* and *race*. Gender had two attributes: *male* and *female*, and race had five attributes: *white*, *African American*, *other/mixed*, *Asian American*, and *Latino*. A decomposition of the sample according to gender and race variables is described in Table 1.

Data Analyses

The authors fit five logistic regression models using Stata 11 software to determine the relationship (if any) between the outcome variables (i.e., influence clients, personal responsibility, success, importance of success, and knowledge and skills) and the independent variables (i.e., WLOC, gender, and race). First, it was determined whether WLOC could be treated as a continuous linear variable by testing if the model with WLOC as an ordered categorical variable was nested in the model with WLOC as an unordered categorical variable (Jewell, 2004). It was determined whether the restricted model was nested in the full one using both a likelihood ratio test and a graphical representation. If there, indeed, was a monotonic relationship between WLOC and the outcome variable, WLOC was re-entered in the model as a continuous variable in order to create a parsimonious model (see Jewell, 2004). Next independent variables were entered into a univariate model, and variables not significant at $p < .10$ were removed (see Jewell, 2004). A

TABLE 2 Results of Logistic Regression Models

Outcome variable	Explanatory variable	Point estimate	SE	OR	P
Influence clients	Work locus of control (WLOC)	-0.33	0.09	0.72	.00
Personal responsibility	29 < WLOC ≤ 34	-0.67	0.46	0.51	.14
	34 < WLOC ≤ 39	-0.11	0.48	0.89	.82
	39 < WLOC ≤ 44	-1.56	0.49	0.21	.00
	44 < WLOC ≤ 49	-1.35	0.49	0.26	.01
	49 < WLOC	-0.75	0.48	0.47	.12
Success	WLOC	-0.33	0.09	0.72	.00
	African American	1.68	0.80	5.34	.04
	Other	0.72	0.61	2.06	.24
	Asian American	-0.96	0.47	0.38	.04
	Latino	0.54	0.43	1.72	.21
Importance of success	WLOC	-0.15	0.07	0.86	.04

multivariate logistic regression model was generated using all variables that had been found statistically significant at $p < .10$ in the respective univariate models. In the multivariate model, any potential independent variables that had lost their significance at $p < .10$ were removed. WLOC was then rescaled by subtracting 20 and dividing by 5 in order to yield an intercept that corresponds with a plausible (i.e., possible) WLOC score and to create an odds ratio that would correspond to a 5-point increase in WLOC score (see Jewell, 2004). When appropriate, all sets of interactive relationships were tested for significance. If interactive relationships were deemed not significant, they were removed, and the researchers tested the final model for goodness of fit. The resulting point estimates, standard errors, odds ratios, and significance levels are noted in following text. The results of logistic regression models are shown in Table 2.

RESULTS

The first outcome variable, influence clients, was significantly associated with WLOC. Testing whether the restricted model was nested in the full one revealed that, indeed, WLOC could be treated as a continuous linear variable by using a likelihood ratio test, $\chi^2(4, n = 251) = 3.33, p = .50$, which was confirmed through graphical representation. Next, gender and race indicator variables were each entered separately into respective models with influence clients as the outcome. Gender was not significant at the specified .10 level. One of the race indicator variables, the indicator for Asian, was significant, $p = .05$. Thus, all the race indicator variables were inputted

into a model in addition to WLOC with influence clients as the outcome. In the multivariate model with both the race indicator variables and WLOC, the coefficient for Asian was no longer significant at the specified .10 level. Thus, all race indicator variables were removed from the model. A final model was generated using the re-scaled WLOC (calculated by subtracting 20 and dividing by 5). The goodness of fit for the final model was adequate, $\chi^2_{\text{Pearson}}(52, n = 251) = 49.07, p = .59$. In the final model, the *OR* 0.72 signifies that for each 5-point increase in WLOC score (thereby becoming more externally oriented), participants were 28% less likely to report the ability to positively influence clients. That is, workers with an external WLOC are less likely to report being able to positively influence clients than workers with an internal WLOC.

The second outcome variable, personal responsibility, was also significantly related to WLOC. However, unlike the other models, in this case the likelihood ratio test revealed that WLOC could not be treated as a continuous linear variable, $\chi^2(4, n = 250) = 11.86, p = .02$. Graphical representation also confirmed the conclusion that personal responsibility did not correspond monotonically to WLOC. Thus, an indicator variable for each of the WLOC categories (i.e., $29 < \text{WLOC} \leq 34$; $34 < \text{WLOC} \leq 39$; $39 < \text{WLOC} \leq 44$; $44 < \text{WLOC} \leq 49$; $49 < \text{WLOC}$) was entered into the model. Those with a $\text{WLOC} \leq 29$ served as the baseline group. Next, gender and race indicator variables were each entered separately into respective models with personal responsibility as the outcome. Neither was significant at the specified .10 level. Thus, the final model used indicator variables to represent each of the WLOC categories. Given that no assumptions of linearity were made to construct the model, it represents a perfect fit to the data. Among the categories of WLOC, the group with $39 < \text{WLOC} \leq 44$ had an odds ratio of 0.21 compared with the baseline group (composed of those with $\text{WLOC} \leq 29$), and the group with $44 < \text{WLOC} \leq 49$ was found to have an odds ratio of 0.26 compared with the baseline group. Both these odds ratios were statistically significant, and imply that members of these groups are 79% and 74% less likely to report feeling responsibility for clients' welfare than the baseline group, respectively. Though only two of the point estimates are significant, all are negative, which means that all those with a WLOC greater than that of the baseline group are less likely to report perceiving personal responsibility than those in the baseline group. In sum, those with an external WLOC are less likely to report perceiving responsibility for clients' welfare than those with an internal WLOC.

The third outcome variable, success, was significantly related to both WLOC and race. With this outcome variable, the model using WLOC as an ordered categorical variable was nested in the model using WLOC as an unordered categorical variable, $\chi^2(4, n = 251) = 1.85, p = .76$. Thus, WLOC could be treated as a continuous linear variable, which was again confirmed through graphical representation. Gender and indicator variables for race

(using white as a baseline because it was the largest racial group) were both entered separately into respective models with success as the outcome. Gender was significant at the specified .10 level. The race indicator variables for African American and Asian American, too, were significant at the specified .10 level. Thus, the researchers constructed a multivariate model with WLOC, gender, and race all entered as independent variables and success as the outcome variable. In this multivariate model, gender was no longer significant at the .10 level although the race indicator variables for African American and Asian American were still significant at the .05 level. There was no interaction between WLOC and the race indicator variables. Thus, the final model consisted of WLOC and race as explanatory variables with success as the outcome. The goodness of fit of the final model was adequate, $\chi^2_{\text{Pearson}}(124, n = 249) = 121.51, p = .55$. The *OR* 0.72 associated with WLOC signifies that for each 5-point increase in WLOC, thereby becoming increasingly externally oriented, respondents are 28% less likely to report a perception of high success. Among the racial groups, the point estimates for respondents who are African American and those who are Asian American were both statistically significant. Respondents who are African American report having a higher perception of success for any given WLOC score, and respondents who are Asian American report having a lower perception of success for any given WLOC score compared with members of other racial groups.

The fourth outcome variable, the importance of success, was significantly associated with WLOC. In this model, the restricted model in which WLOC was treated as an ordered categorical variable was nested in the full model in which WLOC was treated as an unordered categorical variable, $\chi^2(4, n = 251) = 1.31, p = .86$. Thus, WLOC could be treated as a continuous linear variable. Two separate models were generated: one to see if there was a relationship between gender and importance of success and another to see if there was a relationship between race indicator variables and importance of success. Neither gender nor any of the race indicator variables were significant at the specified .10 level. Thus, a univariate model was created with WLOC as the only explanatory variable. As in the other models, WLOC was re-centered to create a plausible intercept and a meaningful *OR* by subtracting by 20 (to correspond with a plausible WLOC score) and dividing by 5 (to represent a meaningful, substantive increase in WLOC score). The fit of the model was adequate, $\chi^2_{\text{Pearson}}(52, n = 251) = 60.15, p = .20$. In the final model, for each 5-point increase in WLOC score, thereby becoming more externally oriented, respondents are 14% less likely to report that sense of success is important. Thus, workers with an external WLOC are less likely to place importance on success in determining whether they remain in public child welfare.

The final outcome variable, knowledge and skills, was not significantly related to WLOC, gender, or race in any of the univariate models.

DISCUSSION

In sum, survey respondents who scored externally on the WLOC scale were less likely to believe they could positively influence clients, less likely to perceive they have personal responsibility for clients' well-being, less likely to describe themselves as successfully accomplishing goals and objectives, and less likely to note the importance of success as a determinant of future employment decisions than those who scored internally on the WLOC scale. Conversely, those who scored internally on the WLOC scale were more likely to report the following perceptions:

- Ability to positively influence clients,
- Assumption of personal responsibility for clients' well-being,
- Success in accomplishing goals and objectives, and
- Importance of success as a determinant of future employment decisions.

The logistic regression models buttress not only most of the stated hypotheses (four of the five) but also the preceding literature. An internal WLOC in the field of public child welfare appears to be related to a proactive job performance.

In the model for knowledge and skills, the outcome variable was not significantly related to WLOC or to any of the explanatory variables perhaps because the sample was skewed; most respondents (91%) reported having adequate knowledge and skills to accomplish goals. Another possible explanation for the non-finding is that all the Title IV-E graduates are specially educated for public child welfare services, so there are few differences between externally oriented and internally oriented graduates with respect to knowledge and skills. Although this is a statistically insignificant result, the non-finding is meaningful in the sense that the IV-E graduates have confidence in their knowledge and skills for the job, regardless of their WLOC orientation.

The models raise the issue of whether contextual factors influence one's WLOC outlook and, if so, which ones and to what effect. Although Spector (1988) has conceptualized WLOC as a personality variable, he notes that it may change over time. Thus, what experiences might cause shifts between an external and an internal WLOC? For example, can the relationships between the worker and the worker's supervisor change WLOC? Supervision has been found to be of critical importance to worker retention (for example, Jacquet et al., 2007; Dickinson & Perry, 2003). Supervisors might be able to affirm public child welfare workers' use of professional and reflexive street-level discretion in such a way as to engender perceptions that innovative practice, indeed, matters, thereby encouraging internally oriented WLOC behaviors and attitudes. Moreover, supervisors can help workers set and accomplish

goals as well as recognize success, further encouraging internally oriented WLOC behaviors and attitudes.

Additionally, the results of this study also contribute to the literature regarding locus of control, self-efficacy, and worker-organization compatibility. WLOC and self-efficacy are distinct constructs; WLOC is conceptualized as a general belief that professional practice affects outcomes whereas self-efficacy is conceptualized as perception to mobilize the skills necessary to accomplish a task. Nevertheless, both contribute in unique ways to an understanding of the relationships among success, motivation, satisfaction, and retention. In an article on human caring, Ellett (2009) hypothesizes that those who do not feel they can influence outcomes for families may be unlikely to stay. Ellett notes that workers with a strong sense of self-efficacy are likely to persist in the face of adversity. She also suggests that those with a weak sense of self-efficacy will be less confident in their skills, less motivated, less interested in child welfare, less successful, and less likely to stay in public child welfare work than those with a strong sense of self-efficacy.

The results of this study both complement and extend what has been written about self-efficacy and workers' capacities to navigate public child welfare contexts. Those with an external WLOC report feeling less ability to influence clients and less successful in achieving goals than those with an internal WLOC. However, the respondents in this study with an external WLOC do not feel less knowledgeable or skilled than those with an internal WLOC, which shows that WLOC and self-efficacy might mediate/moderate in distinct ways the interactions between workers and organizational contexts. As noted previously, Ellett (2009) hypothesizes that workers with low self-efficacy are unlikely to stay. Respondents in this study irrespective of WLOC orientation feel they are adequately equipped for practice (i.e., they have the skills and knowledge necessary to do their jobs). Thus, WLOC may demonstrate the potency of organizational contexts to discourage otherwise well-prepared workers. Workers with an external WLOC may not be less interested or less motivated to work in child welfare than those with an internal WLOC, but they may feel that they cannot change the organizational context in which practice occurs, thereby reducing their disposition to implement creative-yet-professional street-level decisions. The challenge for the agencies is to support the workers in such a way as to strengthen their decision-making capabilities and critical thinking skills in the service of successful client outcomes. In sum, it is possible that agency constraints and organizational inertia can push workers towards an external WLOC orientation, yet it is also possible that supportive supervision and job design that allows for innovation can push workers towards in internal WLOC orientation.

A final note can be made about the control variables, gender and race. Gender was not a significant explanatory variable in any of the models, and race was significant in only one. It was believed that behaviors and attitudes

typically associated with gender might shape respondents' answers to the questions independent of WLOC. Muhonen and Torkelson (2004) as well as Reitz and Jewell (1979) have found that the relationship between WLOC and work behaviors and attitudes are in some cases mediated and in others moderated by gender. The researchers, however, did not find any evidence to support that hypothesis in the multivariate model although they did find evidence to support that hypothesis in the univariate model in which gender was entered as the only independent variable with success as the outcome. There are more females than males in the sample (229 versus 34). Perhaps a sample with a larger number of males would find that gender, too, is a statistically significant independent variable in the multivariate model with success as the outcome.

It was also believed that cultural beliefs typically associated with racial groups and the distinct structural challenges and opportunities that members of various racial groups face might shape respondents' answers to the questions, irrespective of WLOC score. In the model with success, race, indeed, was related to the outcome variable controlling for WLOC. For any given WLOC score, respondents who were African American were more likely to report a high perception of success than members of other racial groups. The proclivity to report a high perception of success might be evidence of cultural resiliency developed in response to years of racism. For any given WLOC score, respondents who were Asian American are less likely to report a high perception of success than members of other racial groups. The proclivity to report a low perception of success might reflect the high expectations for achievement among many Asian Americans. Thus, respondents who are Asian American might undervalue their achievement in comparison to respondents of other racial groups. Relationships among WLOC, race, and perceptions of practice might be illuminated beyond these initial hunches through interviews or focus groups.

LIMITATIONS

There are several limitations to this study. First, this study is limited to Title IV-E MSW graduates in California who were selected for their interest in public child welfare upon admission to graduate social work school and who were specifically prepared for public child welfare jobs. Consequently, the results may not be generalizable to the population of public child welfare workers, a large percentage of whom have non-social work degrees. In other studies of retention, for example, those with baccalaureate degrees tend to have higher job satisfaction and indicate their intentions to stay more often than others (Weaver, Chang, Clark, & Rhee, 2007).

Second, the study of WLOC was conducted within a larger multi-year Title IV-E MSW graduate retention study (Benton, 2010). The response rate

to the overall study was 49% (1,129 of 2,295). Among the total population of graduates ($N = 2,295$), retention status at the time of study recruitment had been determined for $n = 2,035$. Among those for whom retention status could be ascertained, 69% had stayed in public child welfare. Therefore, in the larger study, those who stayed are overrepresented: 85% of those who responded to the survey had stayed in public child welfare. The overrepresentation of those who stayed in public child welfare among survey respondents might have skewed the results of the WLOC study.

Another limitation related to the sample is the underrepresentation of certain racial groups. Jacquet et al. (2007) found statistically significant differences between survey respondents and non-respondents on the basis of race. Race was used as a potential control variable in the logistic regression models, and it was found to be significant in the model in which success was the outcome variable. It is not known how disproportionate racial representation in the sample might have affected the results.

It is also important to consider limitations in both the outcome and the independent variables. The outcome variables were each constructed from responses to a single question. Basing each of the outcome variables on single responses has limitations in terms of both reliability and validity. However, four of the outcome variables showed a predictable and consistent relationship with WLOC. Thus, as a collection of outcome variables, the limitation of constructing outcome variables from single questions can be mitigated.

There is also a limitation in using the WLOC scale. The authors did not conduct a confirmatory factor analysis to ensure that the WLOC scale measures what it purports to measure. In an exploratory factor analysis, Oliver et al. (2006) suggested that a three-factor model might better fit the data than the unidimensional model used in this analysis. Conducting a factor analysis using this sample is beyond the scope of this initial study. Nevertheless, future studies can consider exploring the three-factor model.

IMPLICATIONS

First and foremost, researchers can investigate the utility of the WLOC construct in the context of human service organizations, especially public child welfare. Glisson and Hemmelgarn (1998) highlight the scarcity of research about climate in human service organizations. These authors draw attention to the unique challenges that public child welfare workers face, such as unexpected problems and a bureaucratic maze of regulations. Future research can investigate the interaction of organizational climate with individuals' work loci of control in public child welfare settings to ascertain how work

environments can encourage internally oriented behaviors and attitudes. Attentiveness to climate can create a work environment wherein those with an internal WLOC feel satisfied and those with an external WLOC perhaps become more internally oriented. Such investigations might lead to positive outcomes for the clients that child welfare workers serve.

As mentioned in the introduction and the discussion, the WLOC construct appears to be malleable over time. How have public child welfare agencies shaped workers' WLOC? And how do workers' WLOC shape the agency? Future studies can investigate the temporal relationship between WLOC and employment in public child welfare, and the results of the study can perhaps be used in job design. Given the high job satisfaction and positive performance associated with an internal WLOC in the literature, jobs can be designed to retain those with an internal WLOC by encouraging initiative performance and by providing reinforcements based on performance, such as promotions. Jobs can also be designed to engender an internal WLOC by strengthening supervision and reducing bureaucratic impediments to practice. Longitudinal data on WLOC, job satisfaction, and retention is currently being collected by CalSWEC to study if and how WLOC is malleable over time.

In terms of education, it is interesting to note the non-finding in terms of knowledge and skills. The special preparation seems to be successful in imparting certain types of knowledge and skills. However, perhaps both the explicit and implicit curricula in social work programs can impart not only the knowledge and the skills needed to accomplish job tasks but also the values needed to have a satisfying career. For example, an important part of field supervision for workers who intend to enter public child welfare might entail recognizing when students' actions lead to a desired outcome. Acknowledging the outcomes of actions for students in the formative environment of a social work program might encourage them subsequently to adopt proactive and creative practices as workers.

The implicit curriculum, too, can engender internally oriented WLOC behaviors. For example, a part of the implicit curriculum is student participation in crafting policies. Through participation in the nurturing environment of the social work programs, students can acquire a positive experience of learning to transform organizations from the inside out by taking actions that, indeed, lead to change. Erbin-Roesemann and Simms (1997) write that internally oriented people are lifelong, self-directed learners in comparison to externally oriented people. The authors caution that their study should not be interpreted as a mandate to hire only workers with an internal WLOC. Rather, they say that those who are internally oriented and those who are externally oriented will respond best to distinct methods of education. Thus, future investigation can explore which alternative methods through the explicit and the implicit curricula might be effective in nurturing externals.

NOTES

1. This article uses the terminology of *external WLOC* to describe a high score on the WLOC scale, which is a continuous scale. The use of this shorthand expression reflects the verbiage commonly used in the literature.
2. Analogous to what was stated in footnote 1, *internal WLOC* is a shorthand way to describe a low score on the WLOC scale, which is a continuous scale.

REFERENCES

- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology, 32*(4), 665–683.
- Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.
- Bandura, A. (1977b). *Social learning theory*. Englewood Cliffs, NJ: Pearson Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Benton, A. (2010). *Why do they stay? Building a conceptual model to understand worker retention and turnover in public child welfare*. Unpublished dissertation, University of California Berkeley, School of Social Welfare, Berkeley CA.
- Blau, G. (1993). Testing the relationship of locus of control to different performance dimensions. *Journal of Occupational and Organizational Psychology, 66*, 125–138.
- Dickinson, N. S., & Perry, R. E. (2003). Factors influencing the retention of specially educated public child welfare workers. *Journal of Health and Social Policy, 15*(3–4), 89–103.
- Ellett, A. J. (2009). Intentions to remain employed in child welfare: The role of human caring, self-efficacy, beliefs and professional organizational culture. *Children and Youth Services Review, 31*, 78–88.
- Erbin-Rosemann, M. A., & Simms, L. A. (1997). WLOC: The intrinsic factor behind empowerment and work excitement. *Nursing Economics, 15*(4), 183–190.
- Fuqua, R., & Couture, K. (1986). Burnout and locus of control in child day care staff. *Child Care Quarterly, 15*(2), 98–109.
- Glisson, C., & Hemmelgarn, A. (1998). The effects of organizational climate and interorganizational coordination on the quality and outcome of children's service systems. *Child Abuse and Neglect, 22*(5), 401–421.
- Jacquet, S., Clark, S., Morazes, J., & Withers, R. (2007). The role of supervision in the retention of public child welfare workers. *Journal of Public Child Welfare, 1*(3), 27–54.
- Jewell, N. P. (2004). *Statistics for epidemiology*. Boca Raton, FL: Chapman & Hall/CRC.
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York, NY: Russell Sage.
- Macan, T. H. (1996). Spector's WLOC scale: Dimensionality and validity evidence. *Educational and Psychological Measurement, 56*, 349–357.
- Martin, R., Thomas, G., Charles, K., Epitropaki, O., & McNamara, R. (2005). The role of leader-member exchanges in mediating the relationship between locus

- of control and work reactions. *Journal of Occupational and Organizational Psychology*, 78, 141–147.
- Meier, L. L., Semmer, N. K., Elfering, A., & Jacobshagen, N. (2008). The double meaning of control: Three-way interactions between internal resources, job control, and stressors at work. *Journal of Occupational Health Psychology*, 13(3), 244–258.
- Morazes, J., Benton, A., Clark, S., & Jacquet, S. (2010). Views of specially-trained child welfare social workers: A qualitative study of their motivations, perceptions, and retention. *Qualitative Social Work*, 9(2), 227–247.
- Muhonen, T., & Torkelson, E. (2004). WLOC and its relationship to health and job satisfaction from a gender perspective. *Stress and Health*, 20, 21–28.
- Ng, T. W. H., Sorensen, K. L., & Eby, L. T. (2006). Locus of control at work: A meta-analysis. *Journal of Organizational Behavior*, 27, 1057–87.
- Oliver, J. E., Jose, P. E., & Brough, P. (2006). Confirmatory factor analysis of the WLOC scale. *Educational and Psychological Measurement*, 66(5), 835–851.
- Orpen, C. (1991). The Work Locus of Control Scale as a predictor of employee attitudes and behaviour: A validity study. *Psychological Studies*, 36, 67–69.
- Reitz, H. J. (1979). Sex, locus of control, and job involvement: A six-country investigation. *Academy of Management Journal*, 22(1), 72–80.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1–28.
- Rotter, J. B. (1990). Internal versus external control of reinforcement: A case history of a variable. *American Psychologist*, 45(4), 489–493.
- Siu, O., & Cooper, C. (1998). A study of occupational stress, job satisfaction, and quitting intention in Hong Kong firms: The role of locus of control and organizational commitment. *Stress Medicine*, 14, 55–66.
- Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91(3), 482–497.
- Spector, P. E. (1988). Development of the WLOC scale. *Journal of Occupational Psychology*, 61, 335–340.
- Spector, P. E., Cooper, C. L., Sanchez, J. I., O'Driscoll, M., Sparks, K., Bernin, P. . . . Yu, S. (2001). Do national levels of individualism and internal locus of control relate to well-being: An ecological international study. *Journal of Organizational Behavior*, 22(8), 815–832.
- Spector, P. E., Cooper, C. L., Sanchez, J. I., O'Driscoll, M., Sparks, K., Bernin, P. . . . Yu, S. (2002). Locus of control and well-being at work: How generalizable are western findings? *Academy of Management Journal*, 45(2), 452–466.
- Spector, P. E., Sanchez, J. I., Ling Sui, O., Salgado, J., & Ma, J. (2004). Eastern versus Western control beliefs at work: An investigation of secondary control, socioinstrumental control, and WLOC in China and the US. *Applied Psychology: An International Review*, 53(1), 38–60.
- Strauser, D. R., Ketz, K., & Keim, J. (2002). The relationship between self-efficacy, locus of control, and work personality. *Journal of Rehabilitation*, 68(1), 20–26.
- Vach, W., & Blettner, M. (2005). Missing data in epidemiologic studies. In P. Armitage and T. Colton (Eds.), *Encyclopedia of statistics* (2nd ed.). doi:10.1002/0470011815.
- Weaver, D., Chang, J., Clark, S., & Rhee, S. (2007). Keeping public child welfare workers on the job. *Administration in Social Work*, 31(2), 5–25.

CONTRIBUTORS

Charity Samantha Fitzgerald, MSW, is a doctoral candidate at the School of Social Welfare at the University of California at Berkeley in Berkeley, CA.

Sherrill Clark, ACSW, PhD, is a research specialist at the California Social Work Education Center (CalSWEC) in the School of Social Welfare at the University of California at Berkeley in Berkeley, CA.