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BURNOUT AND PERSONALITY AMONG YOUTH CARE WORKERS IN WILDERNESS AND RESIDENTIAL SETTINGS

Victor Savicki
Psychology Department
Western Oregon University

Kristin L. Savicki
University of Texas at Austin

ABSTRACT: Demands placed on youth care workers in a wilderness therapy setting appear to be substantially different from those in a typical residential treatment facility. The current study describes and tests for such differences, tests whether workers may self-select for the distinct settings on the basis of personality characteristics, and then tests whether differences in personality and work environment are related to burnout. Significant differences are discussed in light of qualitative data gathered in interviews with workers drawn from both settings under study, and implications for the field are outlined. Burnout and Personality among Youth Care Workers in Wilderness and Residential Settings

Wilderness therapy or outdoor behavioral healthcare, as practitioners are beginning to refer to it, is a relatively recent development in youth care (Russell & Hendee, 2000) that asserts that the splendors and demands of outdoor activities can contribute to therapeutic change. Research suggests that such therapy can be effective (Russell, 2001). The unusual demands of living in the wilderness seem to have beneficial impacts on clients. But what of the impact on youth workers? Almost no research has been done to document how working in a wilderness setting impacts the well-being of staff in such settings. Since burnout has been shown to be a major detriment to the well-being of child and youth workers (Freudenberger, 1977; Savicki, 1993), the current study examines this phenomenon in the wilderness setting. Of particular interest is the contribution of work environment and personality to burnout. Wilderness therapy workers will be compared to more typical residential milieu workers as a point of comparison.

CHARACTERISTICS OF WILDERNESS VERSUS RESIDENTIAL WORK SETTINGS

Although there are many different kinds of "adventure" programming, the current study compares an inpatient wilderness setting to a more typical "bricks and mortar" residential treatment setting. Both programs aim to treat youth with a variety of behavioral, mood, and substance abuse disorders. The key difference is where the clients and staff reside and the work demands associated with the respective treat-

ment milieus. In the wilderness setting workers reside outdoors with their clients for 24 hours a day on (stet) shifts, with six days off in-between. They must travel by foot across territory with few roads. They have to cook on fires made without matches. They sleep outside even in inclement weather. Even basic functions of elimination must follow rules for minimum environmental impact. Although there are systems of logistical and clinical support, much of each work day is spent isolated from all except the client group and other work team members.

In contrast, the residential treatment facility is a complex of buildings easily accessible by auto from the nearby town. As expected, faucets run, toilets flush, food is served in a cafeteria, and the normal modern conveniences exist as in other residential situations. Residential staff are split into teams which deal primarily with one group of students, but there are daily opportunities for interaction with different students, staff, and support personnel. Staff work four-day or four-night shifts (not both), and after each day's or night's work they are able to return to their homes.

The striking contrasts in the work settings just described lead to questions concerning the impact of those work environments on staff burnout. Work environment has been found to contribute strongly to burnout (Maslach, 1993), and differential work environments have been found to have differential effects on burnout (Savicki, 1993).

Burnout

Burnout has been defined as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment" (Maslach, Jackson & Leiter, 1996). This definition corresponds with the description by Ganster and Schaubroeck (1991) in which burnout is conceived as a "chronic affective response to stressful work conditions" (p 239). Burnout stands in contrast to engagement with one's job (Maslach & Leiter, 1997)

Burnout develops over a long period of time in reaction to an accumulation of chronic stressors that often either gradually shift from challenges to threats (Lazarus & Folkman, 1984), become habituated by the worker who no longer appraises the stressors as relevant (Hepburn, Loughlin, & Barling, 1997; Leiter, 1993), or remain unacknowledged and out of awareness (Cramer, 2000). In contrast, acute stressors more typically contain easily identified, distinct beginnings and endings, and which, once resolved, can be set aside. Acute and chronic stress have been linked to different psychological and physiological reactions (Fujigaki & Mori, 1997). Several approaches to the development of burnout appear in the literature which postulate gradual development of burnout over time (Golembiewski & Munzenrider, 1988; Leiter, 1993; Leiter & Maslach, 1988).

Work Environment and Burnout

Various authors have reviewed the relationships of burnout with environmental variables (Cordes & Dougherty, 1993; Lee & Ashforth, 1996; Shirom, 1989; Wright & Cropanzano, 1998). Overall, environmental

variables have seemed more powerful than personal variables in explaining burnout (Maslach, 1993).

For example, research has shown that the situational demands of workload and work pressure contributed strongly to both emotional exhaustion and depersonalization as did work underload and number of stressful events. These factors were not as potent in affecting personal accomplishment (Fox, Dweyer, & Ganster, 1993; Frew & Bruning, 1987; Froggatt & Cotton, 1987; Lee & Ashforth, 1996). Surprisingly, number of stressful events showed a positive relationship with personal accomplishment (Lee & Ashforth, 1996). Situational demands have the potential to impact the various aspects of burnout differently.

Role conflict and role ambiguity, and loss of job control have been shown to increase both emotional exhaustion and depersonalization. Task orientation, the degree to which the environment supports efficient work organization, was related to all three burnout sub-scales (Lee & Ashforth, 1996). Chaotic organization predicted higher emotional exhaustion and depersonalization and lowered personal accomplishment (Savicki, 2002). The degree to which workers felt that management imposed controls on them was related to greater depersonalization in some samples (Savicki & Cooley, 1987), but lowered depersonalization in others (Savicki, 2000).

Social supports from co-workers and supervisors buffered against emotional exhaustion and depersonalization (Lee & Ashforth, 1996) and in some cases were related to personal accomplishment (Savicki, 1993, Savicki, 2002). The job enhancement factor of autonomy buffered against emotional exhaustion and depersonalization but had no relation to personal accomplishment (Lee & Ashforth, 1996). The opportunity and support to try innovative ideas at work has been linked to higher personal accomplishment (Savicki, 1993, Savicki, 2002).

In summary, the combination of social support from co-workers and peers, autonomy, efficiently organized work without over-control by managers, lower pressure to work and freedom to innovate are predicted to set the environmental context for lower burnout.

Consistent with the writings showing differential affective responses to differing work environments (Hackman & Oldham, 1980, Savicki, 1993) we propose the following hypothesis:

Hypothesis 1. Measures of work environment in a wilderness therapy setting will be significantly different from those in a residential treatment setting.

Personality Factors

Personality and job selection.

Following the tenets of the person-environment fit model, Holland (1997) reported findings indicating that individuals made career selection choices based on their perception of the match between their personality and potential work settings and work demands. Holland's personality theory is based on assessment of interests and is focused primarily on the

world of work. In reviewing the literature concerning the widely used, and more broadly focused Five Factor Model (FFM) of personality (Compton, 1998), Tokar, Fisher & Subich (1998) indicate overlap between it and Holland's conceptualization. Therefore, the dimensions of the FFM (Neuroticism (Anxiety), Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) are likely to be related to career choice and work setting selection.

Considering both personality and the differences between wilderness and residential work settings elaborated above, we propose the following hypothesis:

Hypothesis 2. Workers self-select for the distinct wilderness versus residential settings on the basis of personality characteristics.

Personality and Burnout.

Job stress researchers have studied individual differences in the belief that they influence reactions and appraisals of events (Cox & Ferguson, 1991). Personality traits have been considered as important factors in determining how individuals adapt to the ongoing stresses of their lives (Green, 1996; Watson & Hubbard, 1996). Personality has been related specifically to various aspects of response to work; e.g. job satisfaction, performance, commitment to work, longevity at work, and burnout (Tokar, Fischer & Subich, 1998). Although personality alone has been linked to burnout, Zellars, Perrewe & Hochwarter (2000), suggest that a more comprehensive understanding of this phenomenon can be developed by examining the joint action of work environment and burnout simultaneously. Their research used role conflict, ambiguity, and overload as environmental variables, and the FFM scales as personality variables. They found that in the presence of environmental role difficulties, the personality variables of neuroticism related to higher emotional exhaustion, and extraversion and agreeableness related to lower (stet)Independent of role difficulties, extraversion and openness predicted higher personal accomplishment.

The current study uses a wider variety of work environment variables, and also proposes an hypothesis which predicts the joint action of personality and work environment:

Hypothesis 3. Both work environment and personality factors combine to predict burnout.

METHODS

Participants

Participants were 67 treatment providers for drug and alcohol-affected youth in a wilderness setting (n = 34) and in a residential treatment facility (n = 33). Both facilities were located in the same rural Western community and were administered through the same corporation. Thus geographic location and corporate culture were controlled.

Materials

A 141- item questionnaire measured several types of information related to the research hypotheses. The following measures were included in this questionnaire:

Demographics. Several demographic factors were measured: age, gender, marital status, education level, time in current job position, time in the youth work field.

Maslach Burnout Inventory (MBI). The factor analyzed sub-scales for this measure include: Emotional Exhaustion, Depersonalization, and Personal Accomplishment (Maslach, Jackson, & Leiter 1996).

Emotional Exhaustion is the extent to which a worker feels worn out and drained by the job. Depersonalization is the extent to which workers think about and treat inmates and their families in an unfeeling and impersonal manner. Personal Accomplishment describes the extent to which workers feel successful in their work. This last scale goes down as workers become burned out.

The MBI is a widely used instrument in human service professions. The scales have been established as reliable and valid in a number of studies (Maslach, Jackson, & Leiter, 1996). The coefficient alphas for the scales in the current sample are: Emotional Exhaustion, .89, Depersonalization, .73, and Personal Accomplishment, .75. An item was dropped from both the Depersonalization and Personal Accomplishment scales to achieve these alphas.

Work Environment Scale. Selected sub-scales from the Work Environment Scale (WES) (Moos, 1981) were used to measure six different dimensions of a work environment characteristic called social climate. Sub-scales were included based on their relation to burnout as indicated in previous research. The 54, true-false items included six nine-item scales:

Peer Cohesion (PC). Peer Cohesion is the amount of friendliness and support that is perceived in co-workers.

Supervisor Support (SS). Supervisor Support is the support of management and the extent to which management encourages workers to be supportive of each other.

Autonomy (A). Autonomy is the degree to which workers are encouraged to be self-sufficient and to make their own decisions.

Task Orientation (TO). Task Orientation is the extent to which the work environment emphasizes efficiency and good planning.

Work Pressure (WP). Work Pressure is the extent to which the press of work dominates the job milieu.

Innovation (INN). Innovation is the extent to which variety, change, and new approaches are emphasized in the work environment.

Internal consistency for the six WES scales in the current sample is as follows: PC = .73, SS = .78, A = .67, TO = .66, WP = .71, INN = .73. Items were dropped from the Autonomy, Task Orientation and Innovation scales to achieve the above levels of reliability.

Five Factor Model (FFM) of personality dimensions. Personality was measured using a short version of the FFM personality factor approach (Fossum, Weyant & Etter, 1996). For this 35-item scale, each sub-scale had seven items. The scales and key defining traits for each include: 1) Anxiousness: anxious, hostile, self-conscious; 2) Extraversion: outgoing, sociable, upbeat, assertive; 3) Openness to experience: curiosity, flexibility, unconventional attitudes; 4) Agreeableness: sympathetic, trusting, cooperative, straightforward; 5) Conscientiousness: diligent, disciplined, well-organized, dependable. Alphas for the sub-scales in this sample are Anxiousness .82, Extraversion .80, Openness .66, Agreeableness .64, Conscientiousness .71. Two items were dropped from the Agreeableness scale to achieve the above alpha.

Procedures

Workers in the two settings voluntarily completed the anonymous research questionnaire during a weekly in-service training meeting. Four staff members (two each from the wilderness and residential programs) were selected for qualitative interviews, quotes from which can be found in the discussion.

RESULTS

Several significant differences in worker demographic variables appeared between the Wilderness and Residential work settings. As table 1 indicates, workers in the wilderness setting were more likely to be single (97%), college graduates (77%); while residential workers had a much broader range of educational background (from high school dropout (6%) to doctoral degree (3%)) and were more likely to be married, either currently (61%) or in the past (15%). The wilderness workers tended to be much more homogeneous in demographics than the residential workers. No differences appeared between the settings on the basis of age, time in current position, or time in the child care field. Each research hypothesis will be examined in order.

Hypothesis 1: Work Environment

In addition to the obvious differences between Wilderness and Residential work settings mentioned previously, the two settings also showed significant differences in measured social climate variables ($F(6, 60) = 6.50$, $p < .001$). As table 2 indicates, the wilderness setting was significantly higher on Peer Cohesion, Supervisor Support, and Autonomy, and lower on Work Pressure. Such findings indicate that despite the higher demand on basic survival tasks, the workers in the

wilderness setting found more social support from co-workers and supervisors, perceived greater freedom to make moment-to-moment decisions about their work life, and experienced less intense pressure to focus on work tasks than did workers in the more typical residential work setting.

Table 1
Comparisons of Workers in Wilderness and Residential Settings on Demographic Variables

Demographic Variable	Wilderness	Residential	Difference
Age (mean)	26.9	30.9	ns
Gender			ns
Male	44%	55%	
Female	56%	45%	
Marital status			X2(4) = 37.4***
Married	3%	61%	
Separated	0%	6%	
Divorced	0%	9%	
Cohabitating	26%	6%	
Single	71%	18%	
Education level (median)	College degree	2 years of college	X2(8) = 25.8**
Time in current position in years	6-9 months	6-9 months	ns
Time in child care field in years	1.5-2.5 years	2-3 years	ns

** $p < .001$, ***$p < 0001$, ns = not significant

Hypothesis 2: Personality and Work Setting Selection

None of the personality characteristics showed significant differences between the Wilderness and Residential settings (see table 2). Self-selection for work in the wilderness or residential setting did not appear to be strongly related to personality characteristics.

Hypothesis 3: Burnout and Personality

A significant difference in burnout appeared between the Wilderness and Residential settings ($F(3, 63) = 2.84$, $p < .05$). Emotional Exhaustion was significantly higher for workers in the residential setting, and Depersonalization was marginally higher ($p < .07$) in the residential setting. There were no differences in Personal Accomplishment (see table 2).

In the following analysis the two work settings were combined in order to examine the relative contributions of the work environment and personality to burnout. For each burnout sub-scale, a hierarchical multiple regression was done with work environment variables in Step 1 and personality variables added in Step 2. In such an analysis all variables in Step 1 are considered together to examine their joint contribution to predicting burnout. In Step 2 personality variables are tested to find which

add significantly to the prediction of the burnout scale above and beyond those included in Step 1. Thus, the final analysis can reveal which work environment and personality variables acting together are related to which specific burnout sub-scales. Demographic variables did not contribute to explanations of burnout in this analysis; therefore they were not included.

Table 2
Comparisons of Workers in Wilderness and Residential Settings on Burnout, Work Environment, and Personality

	Wilderness		Residential		
Variables	Mean	SD	Mean	SD	F(1,65)
Work Environment					
Peer Cohesion	7.09	.99	5.42	1.89	20.53***
Supervisor Support	7.38	1.44	5.55	2.68	12.32***
Autonomy	6.94	1.07	5.64	2.01	11.06***
Task Orientation	5.47	1.19	4.78	1.71	3.62
Work Pressure	4.35	2.07	5.94	2.28	8.91**
Innovation	5.94	1.72	5.67	2.31	30
Personality					
Anxiety	17.09	3.96	18.82	6.28	1.91
Extraversion	28.84	3.69	27.48	4.45	1.99
Openness	30.16	3.31	29.18	3.52	1.21
Agreeableness	20.56	2.68	20.09	2.61	.47
Conscientiousness	28.56	3.58	27.76	3.24	78
Burnout					
Emotional Exhaustion	21.18	7.24	28.15	11.82	8.54**
Depersonalization	4.65	4.18	6.88	5.73	3.33
Personal Accomplishment	39.88	5.17	39.15	5.55	.31

* $p < .05$, ** $p < .01$, *** $p < .001$

Emotional Exhaustion

For Emotional Exhaustion, Step 1 was significant ($R2 = .36$ $F(6,57) = 5.355$, $p < .001$). Yet, no single work environment variable emerged as significantly stronger than any other (see table 3). However, when personality variables were added, not only was emotional exhaustion related to higher Anxiety and lower Conscientiousness, but also higher Work Pressure emerged as significant ($R2 = .59$ $F(13,50) = 5.67$, $p < .001$). In other words, in a work setting with a good deal of pressure to get the job done, workers who react in a nervous or self-conscious manner and who are not disciplined or well-organized are more likely to experience emotional fatigue and loss of energy.

Table 3
Hierarchical Multiple Regressions with Burnout predicted by Work Environment and Personality

Variables	Emotional exhaustion	Depersonalization	Personal accomplishment
Step 1: Work environment	R2= .36 F(6,57)= 5.355***	R2= .32 F(6,57)= 4.42***	R2= .20 F(6,57)= 2.39*
Peer cohesion	b = -.074	b = -.246	b = .067
Supervisor support	b = -.215	b = -.115	b = .153
Autonomy	b = -294	b = -.175	b = .157
Task orientation	b = -.177	b = -.276*	b = .298*
Work pressure	b = .135	b = -.039	b = -.006
Innovation	b = .098	b = .173	b = -.225
Step 2: Personality	R2= .59 F(13,50)= 5.67***	R2= .54 F(13,50)= 4.489***	R2= .59 F(13,50)= 5.53***
Anxiety	b = .482***	b = .278*	b = -.174
Extraversion	b = .164	b = -.047	b = .551***
Openness	b = .238	b = -.114	b = .002
Agreeableness	b = -.126	b = -.149	b = .077
Conscientiousness	b = -.243*	b = -.132	b = -.019

* $p < .05$, ** $p < .01$, *** $p < .001$

Depersonalization

For Depersonalization, Step 1 was significant ($R2 = .32$ $F(6,57) = 4.42$, $p < .001$), with lower Task Orientation predicting higher depersonalization (see table 3). Step 2 indicated that higher Anxiety was also related to depersonalization ($R2 = .54$ $F(13,50) = 4.489$, $p < .001$). Taken together it appears that when work is disorganized or chaotic, and the individual worker is nervous or anxious, the worker will emotionally distance him or herself from clients.

Personal Accomplishment

For Personal Accomplishment, Step 1 was significant ($R2 = .20$ $F(6,57) = 2.39$, $p < .05$), with higher Task Orientation predicting higher personal accomplishment (see table 3). Step 2 indicated that higher Extraversion was also related to personal accomplishment ($R2 = .59$ $F(13,50) = 5.53$, $p < .001$). Taken together it appears that in a well-organized , efficient work place, someone who is sociable and assertive will have a greater sense of achievement on the job.

In summary, both environmental and personality factors played a part in the perception of burnout in youth care workers in the current study. A higher pressure to complete tasks, and a disorganized work place seemed to contribute to the negative aspects of burnout (emotional exhaustion and depersonalization); especially when the worker was anxious and not personally well organized. A sense of achievement at work also was related to a more organized workplace and a personality characteristic that may be described as outgoing.

DISCUSSION

The following discussion incorporates themes revealed in the results section above, as well as qualitative data derived from interviews with workers from the two different work settings.

Worker Selection of Wilderness versus Residential Settings

The homogeneity demographics of personnel in the Wilderness setting had less to do with the personality characteristics of the workers than with their level of interest in and commitment to outdoor programming. Likewise, the demands of being away from home for eight days at a time seemed to lead married individuals to self-select out of such a situation. Residential staff commented that a major advantage to their jobs as opposed to those of wilderness staff is that they get to "go home at night." One staff stated that she had briefly considered the wilderness program for employment but that ultimately she wasn't interested in the lifestyle it necessitated. Also, she stated that she was in this work for the students, as she had "grown up in some of these places [i.e. therapeutic residential placements] and feel that I have something to offer back." By contrast, one wilderness staff commented that she is not in this job because she wants to work with youth, but with youth-in-the-wilderness. Wilderness staff

interviewed had a history of outdoor work and hobbies, and expressed that a major draw of the job was the opportunity to be outdoors. One wilderness staff expressed that he had felt the "power of the wilderness" as a positive force in his own life, and was highly interested in sharing that with others.

It may be that the general five factor model of personality was less sensitive to work setting selection that an interest-based, work-oriented personality measure such as Holland's (1997) would be. It also may be that the common goal of both wilderness and residential workers on helping troubled youth as a career was more powerful as a career selection factor than was the location in which workers accomplished this goal. Workers seemed to make clear choices about which setting in which to work. The current personality measures were not sensitive to the rationale for those choices.

Teamwork and Social Support

A by-product of wilderness worker demographic homogeneity and the inescapable demands of daily living in the wilderness setting seemed to forge a higher level of teamwork. Respondents from the wilderness program commented that teamwork is "vital" to their job; being out for eight days at a time with an semi-autonomous staff team of three or four workers, things "fall apart" if the team is not functioning properly. Team members are highly dependent on one another. In addition, as communication skills (i.e. openness to others' suggestions and ideas) are a primarily focus of education for the students; the staff's teamwork functions as an important source of modeling. Problems with teamwork occur, one respondent stated, when teams are too inconsistent as staff get switched around among teams, and also when staff members are not assertive with giving open and honest feedback. Improvements to the staff's teamwork could be made, another respondent suggested, by more discussion/goal-setting at the beginning of the workweek to assess each other's strengths and weaknesses and plan accordingly.

Staff from the residential program had mixed responses regarding the importance of teamwork. One respondent, a teacher, stated that she works very independently and has virtually no teamwork in her job. Another respondent, a residential staff member, stated that it was important for her to "get along" with the other staff members on her team, but she did not phrase the need for teamwork in the same urgent manner as did the wilderness staff.

Work Structure

Across work settings, the organization of work showed significant relation to burnout; both Depersonalization and Personal Accomplishment. Each work setting had its own unique set of demands for structure and organization. Respondents from the wilderness program agreed that though there are "things that have to get done" within the workday; they

have a great deal of freedom to be creative in the ways that these tasks are accomplished. This did not have the negative consequence of having to make everything up from scratch or have to structure things entirely on their own. Staff were able to "get by" with the treatment structure/curriculum at its basic level which was given to them, but there was also the opportunity to branch out from this and add one's own creativity. Respondents from the residential program expressed similar sentiments; "I have to do what I need to do with the girls, but I can go ahead and do this my own way." It seems that the extra demands of basic survival and comfort in the wilderness setting may have been helpful in structuring the work day, thus making it more predictable and reducing the level of role ambiguity that has been associated with burnout (Lee & Ashforth, 1996).

Work Pressure

The pressure to accomplish work was related to burnout; specifically Emotional Exhaustion. Work demands have consistently been found to contribute to burnout (Lee & Ashforth, 1996). All respondents, wilderness and residential, stated that the work pressure they felt was primarily self-imposed out of an internal drive to do the job well. One wilderness staff did express that work pressure for her was higher when she first started the job, as "the breadth of skills we are expected to know — from map and compass and fire building to astronomy, chemical dependency treatment, and Native American ceremony — is somewhat insane!" It may be that the perception of pressure is also related to task structure and team support.

Personality Characteristics

Although the two work settings were not different with regard to the personality characteristics of its workers, personality characteristics did enhance the explanation of burnout. Workers high on Anxiety and low on Conscientiousness and Extraversion were more likely to show burnout under specific work environment conditions. One might expect that the inherent unpredictability of the Wilderness setting would exacerbate the level of anxiety experienced in that setting. However, a wilderness staff member reported that his anxiety in the field was greatly lessened by all the outside support he is able to call upon; therapists, field directors, medical staff, and support staff. He stated that there are a great deal of logistical/clinical/medical needs that are just taken care of and that field staff can confidently leave to others. In terms of conscientiousness, respondents agreed that they were personally very conscientious in their work, and that this was in some ways a personality factor they carried to whatever work they did. Nevertheless, one respondent also noted that she has not always been so conscientious in her work life, and for herself this quality has increased in response to the potential severity of consequences to youth out in the wilderness if she does not plan and follow through on tasks. Extraversion seems directly related to the ability to create and draw

support from teamwork. Social support from supervisors and co-workers is a two-way street. Social isolates would find it difficult to mobilize this buffer to burnout.

It may be that the work environment variables of social support and task structure available in the wilderness setting helped to contain whatever anxiety wilderness workers were likely to experience. Anxiety was related to both emotional exhaustion and depersonalization. Wilderness workers showed lower levels of each; yet their personality characteristic of anxiety was not different from that of the residential workers. Further research needs to be done to tease out the possible buffering effect of the work environment against personality tendencies to react negatively to stressful events.

CONCLUSIONS AND RECOMMENDATIONS FOR PRACTICE

One wilderness staff member stated that in times that he has felt work-stress and burnout, it did not result from the obvious proximate cause: "It wasn't the kids — you know what the kids are going to give you." The stress came instead from poor teamwork or other staff-related problems. This suggests that wilderness therapy, and youth care in general, does not have to be an inherently high-stress field with unchangeably-high rates of turnover. Results indicate that stressful factors can be controlled successfully and even the most seemingly-demanding work environment (trekking through the wilderness) can provide positive and supportive experiences for staff as well as clients.

The data also suggests that the interplay between personality and work environment is quite important in understanding burnout. Past research has, by and large, examined either of these variables separately. However, attempts to develop non-stressful work environments or to select workers with resilient personalities ignores the impact of the interaction between the two. We agree with Zellars, Perrewe, and Hochwarter (2000) that further exploration is needed to focus on the joint impact of personality and environment on burnout and other important work related reactions. A mulit-level approach is likely to lead to a more complete understanding of these phenomena.

In terms of recommendations for practice, the current findings concerning the importance of the structure of work echo results in previous research (Savicki 1993, 2002). The wilderness seems to provide a structure built on natural consequences; e.g. if your staff team doesn't manage time well enough to get to camp early, your sleeping bags will get wet as you build shelters in the snowstorm. Although more typical residential settings do not include such harsh consequences, it might be useful to provide structures in an overt and timely basis that aid workers to do their jobs. For example, daily planning meetings, bi-weekly teamwork reviews, weekly job goal assessments are structures that may enhance worker communication and teamwork and may also increase the focus on major work issues. Such structures were in place in the wilderness program and are consistent with child and youth care practice (Savicki & Brown, 1985).

Beyond structure provided by the work environment, individuals may benefit from learning how to structure their own work lives. For example, low conscientiousness was related to burnout. Although the personality characteristic of conscientiousness may not be amenable to change directly, specific related skills such as time management and systematic problem solving can be learned. Such skills would be useful, especially in the absence of external work structure. Likewise, providing opportunities for workers to express their sense of autonomy and control over their work environment through soliciting their input and encouraging their innovative ideas would enhance individual worker abilities to exert personal structure in the sometimes chaotic child and youth care context.

Personal accomplishment was found to relate to higher extraversion; how can practitioners encourage this trait in youth care workers? A structure put in place in the wilderness program offers a possible solution; field staff sit down in a session each week to provide positive and constructive feedback to fellow staff members, and occasionally to higher-level staff such as supervisors and therapists as well. This supports the specific skill of assertiveness (related to the trait of extraversion) in that even normally introverted staff are highly encouraged, even required, to speak their minds each week and if they have a problem with a co-worker, to voice their feelings and needs and constructively ask for change.

Although youth care programs like those studied here may already be well-informed on how to reduce burnout, a theme that emerged during interviews of staff at these programs was that such practices were not always followed. Supervisors with excellent policies about how to treat staff and increase their ability to be fresh and perform well, often abandoned those policies in the heat of the moment. An example given was that supervisors do well to focus on encouraging staff to take vacations, but that this focus occasionally fell by the wayside when burnt-out staff were encouraged to work shifts when staffing was low. In other words, management employs many techniques for burnout reduction, but at times these techniques suffer as other priorities take precedence.

Finally, despite the positive work environment factors leading to less burnout in wilderness staff, turnover in these jobs remains fairly high. Further study using measures sensitive to other factors relating to job choice and change, as well as studies with longitudinal designs, could assist these programs in identifying ways to retain staff and build on already established successes in their relatively low-burnout work environment. In addition, it may be useful to use a different model when thinking about turnover with wilderness staff. Because of the adventurous and nomadic culture of staff in their mid-20s who tend to work for wilderness programs, it may be unrealistic to expect them to stay for a long time at any one job. Rather, their longevity in the field of youth work might be better seen as a series of shorter work episodes interspersed with "leaves of absence." If this model is correct, management of wilderness

programs would do well to enhance the likelihood that workers will return rather than thinking of them as permanently unavailable once they leave a specific position.

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