

Targets for Rehabilitation: An Evidence Base for Adaptive Coping With Visual Disability

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Purpose: This study examined the role of assimilative and accommodative coping dimensions for the mental health of people with visual impairment, with the aim of informing rehabilitation planning.

Research Method: Telephone interviews were conducted with 216 middle-aged adults with vision loss. Assimilative and accommodative coping were assessed both in terms of general coping tendencies and goal-specific coping. **Results:** Assimilation was used more than accommodation in goal-specific coping. In contrast, endorsement levels of general coping tendencies were higher for accommodative compared with assimilative coping. The strongest beneficial effects on mental health emerged for accommodative coping as a general coping tendency and assimilative coping as a goal-specific strategy. **Conclusions:** Results suggest that vision rehabilitation programs should encourage accommodative coping as a general life approach. However, for specific goals, rehabilitation should help individuals determine their feasibility, and focus on developing assimilative strategies for feasible goals, while reevaluating and letting go of unfeasible goals.

Keywords: coping, disability, functional impairment, vision loss, midlife

Impact and Implications

- Study findings contribute to the literature on effective coping with vision disability by providing a first detailed look at how two different modes of coping (assimilative and accommodative coping) in two different coping contexts (general coping tendencies vs. goal specific coping) differentially predict mental health symptoms and life satisfaction for middle-aged adults with vision disability, an understudied population.

- Study findings provide important clues for the vision rehabilitation field as it appears that healthy adaptation to visual disability requires flexible coping approaches that may differ depending on the context in which that coping takes place.

- Vision rehabilitation programs may facilitate healthy adaptation and effective coping with vision impairment by exploring the feasibility of pursuing specific goals in the face of disability-related goal interference, and providing counseling regarding how to pursue feasible goals (assimilative coping strategies) and how to reevaluate or let go of nonfeasible goals (accommodative coping strategies).

Introduction

Vision impairment has been identified as the second most common disability among middle-aged and older adults, affecting 16.5 million Americans aged 45 years and older. Although the prevalence of vision loss increases with age, as many as 15% of adults aged 45–64, representing 9.3 million middle-aged Americans, report having some type of vision problem even when using corrective lenses (Horowitz, Brennan, & Reinhardt, 2005). Given this prevalence, vision rehabilitation agencies provide myriad services—including establishing rehabilitation goals, conducting eye examinations, training on the use of optical aids, and providing orientation and mobility services—and are charged with the challenges of meeting the needs of diverse clients (Owsley, McGwin, Lee, Wasserman, & Searcey, 2009). A focus on rehabilitation and adaptive coping that is responsive to the needs and circumstances of various clients is necessary to effectively promote health and well-being.

The experience of chronic vision impairment has been consistently linked to depression and poorer perceived quality of life (Horowitz, Reinhardt, & Kennedy, 2005; Mitchell & Bradley, 2006). Although most of this research has focused on older adults, there is evidence indicating that the risk for subsequent mental health problems (e.g., depression and anxiety) may be even higher for middle-aged adults (Boerner, 2004; Cimarolli, 2006; Horowitz & Reinhardt, 2006). This may be because of the untimely and non-normative occurrence of a disability in midlife that can interfere with the pursuit of life goals common during this point of adult life (e.g., career goals, supporting a family; Nurmi, 1992). The disability and related goal interference can result in a significant interruption of daily routines and subsequent emotional distress (Wheeler, Munz, & Jain, 1990). Indeed, middle-aged adults with vision loss have reported high levels of interference with their

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most important life goals because of vision problems (Popivker, Wang, & Boerner, 2010). However, we know little about how people deal with disability-related goal interference.

Gaining more insight in this respect is critical for the development and design of vision rehabilitation programs. Previous work suggests that addressing clients' life goals should be an integral part of vision rehabilitation, and that this may be best accomplished with a combination of functional skills training and counseling services (Cimarolli, Boerner, & Wang, 2006). In line with this idea, Garnefski and colleagues (2010) found that cognitive and goal-related coping had a significant beneficial effect on depressive symptoms among people with visual impairment. The authors concluded that both types of coping should become targets in psychological interventions for this client population. We also contend that research identifying mechanisms of adaptive coping is critical to helping rehabilitation specialists better address the needs of patients to promote health and well-being, and that more fine-grained research needs to be done in this area. The present study aimed to develop an evidence base for vision rehabilitation by examining coping mechanisms used by middle-aged individuals for managing vision-related goal interference. We set out to assess coping in a comprehensive and conceptually guided way, examining the role of instrumental and psychological coping efforts both in terms of general coping tendencies and goal-specific coping efforts, in predicting mental health and life satisfaction for middle-aged adults with vision loss.

Assimilative and Accommodative Coping: General and Goal-Specific

We draw on the model of assimilative and accommodative coping (Brandtstädter & Renner, 1990; Brandtstädter & Rothermund, 2002), a conceptual framework that is particularly suited to this population and that allows predictions with regard to life goals, coping, and mental health. The model proposes two coping modes that are thought to facilitate positive adjustment to losses and declines. Assimilative coping involves efforts to change one's situation in the face of obstacles in order to pursue goals. Accommodative coping involves a re-evaluation of goals, and a disengagement from goals that are no longer feasible. Although the two coping modes are not seen as mutually exclusive, they are thought to represent somewhat antagonistic processes (Brandtstädter & Rothermund, 2002). Thus, the expectation is that they should have no more than a moderate, negative association with one another. Both have shown substantial positive associations with various measures of well-being and significant negative correlations with depression (Boerner & Jopp, 2007, for a review). In the face of increasing decline, however, accommodative processes in particular are thought to help prevent, or reduce, the severity and duration of depressive symptoms (Brandtstädter & Renner, 1990).

The two coping modes can be reflected both in people's general coping tendencies, as well as in the specific coping strategies used to respond to concrete goal interference related to disability (Boerner & Jopp, 2007; Wrosch, Amir, & Miller, 2011). Previous research on coping with disability has found higher endorsement of goal-engagement/assimilative compared with goal-adjustment/accommodative type strategies in response to concrete day-to-day challenges (e.g., Boerner, Brennan, Horowitz, & Reinhardt, 2010). For general coping tendencies, in contrast, previous work has

documented higher endorsement levels of accommodative compared with assimilative coping (Boerner, 2004). Thus, the existing research evidence clearly demonstrates that assimilative and accommodative coping processes occur both at the general and situation-specific level. However, prior studies have focused on either one or the other and thus a full picture of how both coping strategies are used concurrently across different contexts is lacking. The present study intends to fill this gap. A person may endorse more accommodative coping when thinking about life in general, reflecting a broader life approach. However, when asked about a specific personal goal (e.g., advancing one's career), the same person may report the use of more assimilative strategies. We contend that vision rehabilitation programs may benefit from taking into account both aspects of coping—a client's general coping approach, as well as his or her concrete goal-related coping efforts in specific situations—to understand the complex relationships between coping, mental health, and life satisfaction for middle-aged adults with vision impairment.

Whereas several recent studies have taken the important step to assess task-specific strategies used in response to health induced restrictions in different life domains (e.g., Boerner et al., 2010; Garnefski et al., 2010; Hall, Chipperfield, Heckhausen, & Perry, 2010), we are unaware of any previous research that has based such coping strategy assessment on a prior identification of each individual's personal goals. We took this approach in the present study because our previous work has strongly suggested that vision rehabilitation programs would benefit from devoting greater attention to clients' life goals (Boerner & Cimarolli, 2005; Cimarolli et al., 2006), and accordingly, it is imperative that we gain a better understanding of how individuals cope with disruptions of their most important life pursuits. Thus, to provide an evidence base to further inform vision rehabilitation planning, the present study examined the roles and dynamics between two modes of coping (assimilative and accommodative) and two different coping contexts (general and goal-specific) among middle-aged adults with vision loss.

Study Hypotheses

1) Based on previous research showing higher endorsement of assimilative type strategies in response to concrete vision-related challenges (Boerner et al., 2010), we expected that assimilative coping would be more prominent in response to concrete goal interference. In contrast, based on prior work finding higher mean levels of accommodative compared with assimilative coping tendencies in a comparable study population (Boerner, 2004), we expected that accommodative coping would be more readily available from a general coping standpoint.

2) Drawing on the model of assimilative and accommodative coping (Brandtstädter & Renner, 1990), we expected that the associations between the two coping dimensions would be somewhat antagonistic (i.e., negatively associated), in particular for goal-specific coping, because individuals are likely to either intensify a specific goal pursuit or consider disengagement or re-evaluation of the goal.

3) Drawing on theory and previous research, we expected there to be beneficial links for mental health with both assimilative and accommodative coping, but that these positive effects would be

stronger for accommodative coping (Boerner & Jopp, 2007, for a review).

4) Neither the theory nor existing research provides guidance as to whether general coping tendencies or goal-specific coping would be a stronger predictor of mental health outcomes. Therefore, this question was explored in the present study.

Method

Sample and Procedures

Participants for this cross-sectional study were recruited from a pool of 510 middle-aged adults with vision impairment who had been first-time applicants at a vision rehabilitation agency serving the greater New York metropolitan area. Eligibility criteria included the following: age 40 to 64 years, community-dwelling, English-speaking, sufficiently free from hearing and cognitive deficits to participate in a telephone interview, first time applicants for vision rehabilitation services, and onset of vision impairment at age 18 or older. A response rate of 70% was obtained (for a more detailed description of initial participant pool and calculation of response rate, see Popivker et al., 2010). Participants were interviewed over the telephone for approximately 30 min, and all items and response categories were read to the participant during the

interview. The agency's institutional review board approved all study procedures and materials, and participants were asked for oral consent after being read information about the study.

Measures

The major scales used in the study are well-established measures that have been validated in comparable study populations and have shown good psychometric properties in previous research and the present study. The exception was the series of questions on life goals, goal interference, and goal-specific coping. These questions were designed for the present study based on conceptual guidance from theory, because no adequate measures were available at the time of data collection. Descriptive information for study variables and Cronbach's alphas for scale measures are depicted in Table 1.

Sociodemographic characteristics. Single items were used to assess participants' age, gender, race, education, income adequacy, and marital and employment status.

Functional vision loss. Functional vision loss was measured with the 15-item self-report Functional Vision Screening Questionnaire (Horowitz, Teresi, & Cassels, 1991), which assesses the extent to which vision loss causes difficulty in specific functional areas (e.g., difficulty reading labels on medicine bottles). Each

Table 1
Description Information for Sample Characteristics and Major Study Variables (N = 216)

Variable	M (SD)	Actual range	n (%)	Alpha
Age	55 (6.8)	40–64		
Gender (women)			122 (57)	
Race				
White			117 (55)	
African American			66 (31)	
Asian/Pacific Islander			9 (4)	
Native American/Alaskan Native			2 (.09)	
Other			17 (8)	
Ethnicity (Hispanic)			23 (11)	
Employment status (employed)			60 (28)	
Education (at least some college)			149 (69)	
Marital status (married)			63 (29)	
Eye disease (most common)				
Cataract (current problem)			64 (30)	
Macular degeneration			52 (24)	
Glaucoma			52 (24)	
Diabetic retinopathy			65 (30)	
Onset of vision loss during midlife			178 (82)	
Functional vision loss	12.07 (2.4)	4–15		.72
Functional disability	23.36 (6.9)	14–48		.87
Goal interference because of vision	17.88 (7.5)	0–30		.66
Goal-specific coping ^a				
Assimilative	4.42 (1.4)	0–6		.64
Accommodative	1.92 (1.2)	0–5		.44
Adjust goal	1.48 (.90)	0–3		
Let go of goal	.45 (.67)	0–3		
General coping tendencies ^b				
Assimilative	38.78 (10.2)	14–60		.80
Accommodative	40.01 (10.3)	5–59		.81
Depressive symptoms	13.34 (11.2)	0–46		.91
Score above clinical cut-off (16)			75 (35)	
Anxiety symptoms	6.85 (7.1)	0–40		.83
Life satisfaction	14.57 (5.6)	5–25		.82

^a $t(211) = 17.77; p = .000, \alpha = .05.$ ^b $t(211) = -2.83; p = .005, \alpha = .05.$

item was scored: 0 = *no difficulty*; 1 = *difficulty*. Participants were also asked to self-report their eye disease diagnosis (e.g., macular degeneration, glaucoma, or cataracts).

Functional disability. Functional disability was assessed with a modified version of the Older Americans Resources and Services (OARS) Multidimensional Functional Assessment Questionnaire (Center for the Study of Aging & Human Development, 1975), which included both personal (7 items) and instrumental (7 items) activities of daily living ($\alpha = .87$). Items were assessed on a 4-point rating scale, ranging from 1 (*no difficulty*) to 4 (*can't do without help*). The 14 items were summed to create a total score.

Life goals and goal interference. Participants were first asked to identify three current goals that they would consider to be most important. They were then asked to rate each goal on a scale from 0 (*no interference*) to 10 (*extreme interference*) regarding the degree to which their vision impairment interferes with each goal. A total goal interference score was computed by summing the individual interference ratings.

Goal-specific coping. Participants were asked "To what extent would you say your way of dealing with this goal (interference) involves—(a) still working on this goal, (b) putting effort into the goal, (c) reevaluation of this goal, and (d) letting go of this goal" (4-point Likert-scale, 0 = *not at all*, 3 = *very much*). These four items were originally conceptualized as reflecting a mode of assimilation (a and b) versus accommodation (c and d). As shown in Table 1, the Cronbach's alpha for the item-based, goal-specific accommodative coping variable was only .44, probably because adjusting to a goal and letting it go are distinct processes, even though they both represent accommodative efforts. It was therefore decided to use the individual rather than summed items for predictive analyses.

General coping tendencies. Assimilative and accommodative coping tendencies were measured with the English version of Brandtstädter and Renner's Tenacious Goal Pursuit (TGP) and Flexible Goal Adjustment (FGA) Scale (Brandtstädter & Renner, 1990). This 30-item scale is a measure of assimilative (tenacious goal pursuit; item example: "When faced with difficulties I usually double my efforts") and accommodative (flexible goal adjustment; item example: "I adapt quite easily to changes in plans or circumstances") coping tendencies. Each of these orthogonal dimensions contains 15 items. Respondents indicate to what extent items apply to them on a 5-point Likert-scale, ranging from 0 (*strongly agree*) to 4 (*strongly disagree*).

Mental health outcomes. Depressive symptoms were measured with the 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). Respondents indicated on a 4-point Likert-type scale that ranged from 0 (*less than one day*) to 3 (*5–7 times a week*) how often they experienced each depressive symptom in the past week (higher score = higher depressive symptomatology). A cut-off score of 16 is traditionally used with the CES-D to reflect clinically relevant levels of depression.

To assess anxiety symptoms, we used the 21-item Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988). Respondents indicated on a 4-point scale (0 = *not at all*; 3 = *I could barely stand it*) how much each symptom had bothered them during the previous week (higher score = higher levels of anxiety).

In addition, we assessed life satisfaction with the 5-item Satisfaction with Life Scale (SWLS; Pavot & Diener, 1993), designed to assess a person's global judgment of life satisfaction. Partici-

pants are asked to rate their agreement/disagreement with statements concerning their life circumstances on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*; higher scores = greater life satisfaction). Example items are "The conditions of my life are excellent" and "So far I have gotten the important things I want in life."

Analytic Strategy

(a) Paired *t* tests were conducted to address our predictions regarding endorsement levels of assimilative and accommodative coping for both goal-specific coping and general coping tendencies.

(b) A correlation matrix was computed to examine the interrelationships among all study variables in preparation for the multivariate analyses. Specifically, bivariate correlations of assimilative and accommodative dimensions were examined for both general and goal-specific coping to address our prediction of antagonistic relations between them.

(c) Hierarchical regressions were conducted to examine our prediction that both assimilative and accommodative coping would show beneficial links with our mental health outcomes but that these effects would be stronger for accommodative coping, and to explore the unique contributions of goal-specific and general coping to explaining variance in the outcomes. Before entering the coping variables as our main variables of interest for the present article (Block 3 and 4), we accounted for basic participant characteristics (Block 1) and impairment-related factors (Block 2) that have been shown in prior research to have an effect on mental health and well-being of visually impaired adults (e.g., Boerner, 2004; Horowitz, Brennan, & Reinhardt, 2005). In Block 3, the two indicators of goal-specific accommodative coping were entered separately to examine the predictive roles of reevaluating a goal and letting go of a goal as two separate aspects of accommodative coping.

Results

Sample Characteristics

Participants were on average 55 years old ($SD = 6.8$); 57% of participants were women. The sample reflected an ethnically and racially diverse group as detailed in Table 1. The majority reported a relatively high level of education (69% at least some college). However, only 29% of the participants were married and 28% were employed. Of those who were unemployed, 62% were unemployed because of vision loss, and of those who were retired, 55% were retired because of vision loss. Participants reported a variety of eye diseases; the most commonly cited ones were cataracts, macular degeneration, glaucoma, and diabetic retinopathy. Most experienced the onset of their vision problems during midlife. Participants reported significant levels of vision impairment, with an average of functional vision loss in 12 out of 15 domains. Finally, it should be noted that clinically relevant levels of depression were reported by 35% of participants, a percentage that seems alarmingly high compared with the 15% reported for the general adult population (i.e., 11% subsyndromal and 4% major depression; Judd, Paulus, Wells, & Rapaport, 1996).

Extent of Assimilative and Accommodative Coping

For coping at the goal-specific level, assimilative coping was found to be significantly more prominent than accommodative coping ($M = 4.4, SD = 1.4; M = 1.9, SD = 1.2$, respectively), $t(211) = 17.77; p = .000, \alpha = .05$ (Table 1). In contrast, mean levels for general coping indicated higher endorsement of accommodative ($M = 41.01, SD = 10.2$) compared with assimilative coping ($M = 38.78, SD = 10.2$), $t(211) = -2.83; p = .005, \alpha = .05$.

Associations Between Assimilative and Accommodative Coping

The two types of coping, showed a positive moderate correlation in the context of general coping ($r = .33; p = .001$), but a negative correlation of similar magnitude for goal-specific coping ($r = -.27; p = .01$; Table 2). Thus, those who tended to endorse assimilative items were also more likely to endorse accommodative items for general coping, but when it came to specific goal pursuits, the opposite pattern emerged.

Links Between Coping and Mental Health

Findings from the blockwise hierarchical regression analysis are shown in Table 3. General coping tendencies explained more unique variance in mental health (4%–14%) compared with goal-specific coping (2%–5%). Both coping blocks (Block 3 and Block 4) contributed significantly to explaining variance in the three mental health outcomes, with the exception of goal-specific coping in the prediction of anxiety.

For general coping, we found that higher levels of both coping modes were linked to fewer depressive symptoms. A similar pattern emerged for anxiety, although only accommodative coping (but not assimilative coping) significantly predicted fewer anxiety symptoms. Higher levels of accommodative coping were also significantly linked to greater life satisfaction, whereas no link was evident for general assimilative coping.

With regard to goal-specific coping, none of the individual coping variables significantly predicted depressive symptoms, but a significant positive association for accommodative goal adjustment indicated that participants' efforts to adjust their goal in response to vision-related goal interference was related to higher anxiety levels, whereas accommodative efforts to let go of the goal were not linked with anxiety. We found the opposite pattern for life satisfaction, where accommodative efforts to let go of the goal—but not goal adjustment—benefited life satisfaction. Moreover, this was the one case in which we found a significant effect for goal-specific assimilative coping. Thus, those who reported more goal-specific assimilative coping and efforts to let go of a goal (one facet of accommodative coping) were likely to report greater life satisfaction; however, reevaluating the goal (another facet of accommodative coping) did not seem to be linked with greater life satisfaction, and was in fact related to increased anxiety.

Discussion

The purpose of this study was to enhance rehabilitation programming by building an evidence base for understanding effective coping responses for dealing with visual disability so that they can be prioritized and adequately addressed in rehabilitation services. To our knowledge, the present study is the first to consider the role of general coping tendencies and goal-specific coping together in dealing with disability. As predicted based on prior work that examined similar coping dimensions specifically for general or for challenge-specific coping (e.g., Boerner, 2004; Boerner et al., 2010), there was higher endorsement of accommodative compared with assimilative coping levels for general coping tendencies, whereas the assimilative mode was clearly more predominant for goal-specific coping. Thus, generally endorsing an accommodative approach does not mean that one actually chooses to or is able to access those coping strategies when confronted with a concrete problem—it might be a matter of “it's easier said than done.” On a practical level, this insight could be useful for alerting

Table 2
Intercorrelations of Coping, Mental Health, Sociodemographic, and Impairment Variables ($N = 216$)

Variables	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Goal-specific assimilative coping	-.27**	.28**	.18*	-.17*	-.04	.24**	-.12	.09	.11	-.00	.20**	.06	.02	-.10	-.20**
2. Goal-specific accommodative coping		-.23**	-.06	.15*	.12	.01	.13	.10	-.04	-.04	-.09	-.05	.11	.02	.26**
3. General assimilative coping			.33**	-.27**	-.12	.15*	-.03	.01	.01	.07	.19**	.00	.03	-.02	-.01
4. General accommodative coping				-.46**	-.25**	.41**	.17*	.12	-.10	-.13	.02	-.10	-.03	-.12	-.01
5. Depression					.69**	-.53**	-.17*	.10	-.09	.12	-.13	-.03	.12	.36**	.18*
6. Anxiety						-.33**	-.03	.17*	-.13	.18*	-.15*	.01	.08	.37**	.12
7. Life satisfaction							.41**	-.01	.02	.01	.12	-.07	-.10	-.24**	-.17*
8. Age								.07	-.08	.04	-.03	-.12	.03	.18*	.08
9. Gender (female)									-.15*	-.01	-.07	-.12	.08	.15*	.27**
10. Employment status (employed)										-.09	-.11	.10	.12	-.14*	.02
11. Marital status (married)											-.07	-.07	.13	-.12	
12. Education												.06	-.11	-.19**	-.16*
13. Time since vision loss													-.08	-.20**	.00
14. Functional vision loss														.36**	.40**
15. Functional disability															.34**
16. Goal interference because of vision															

* $p < .05$. ** $p < .01$.

Table 3
 General Coping Tendencies and Goal-Specific Coping Predicting Mental Health Outcomes (Listwise N = 213)

	Depression				Anxiety				Life satisfaction			
	B	SE B	b	ΔR^2	B	SE B	b	ΔR^2	B	SE B	b	ΔR^2
Block 1: Sociodemographic				.07*				.11**				.06*
Age	-.38	.12	-.23**		-.09	.07	-.09		.16	.06	.19**	
Gender (female)	1.06	1.53	.05		2.26	.99	.16*		-.32	.77	-.03	
Employment (employed)	-2.29	1.66	-.09		-1.48	1.07	-.09		.11	.83	.01	
Marital status (married)	-.02	1.59	.00		1.61	1.05	.10		1.00	.81	.08	
Education	-.13	.52	-.02		-.33	.33	-.07		.24	.25	.06	
Block 2: Impairment status				.14***				.12***				.09*
Time since vision loss	-.01	.01	-.06		.01	.01	.09		-.00	.01	-.04	
Functional vision loss	-.06	.34	-.01		.02	.23	.01		-.10	.18	-.04	
Functional disability	.53	.13	.30***		.39	.09	.35***		-.16	.07	-.18*	
Goal interference because of vision	.15	.12	.09		-.02	.07	-.02		-.06	.06	-.07	
Block 3: Goal-specific coping				.03*				.02				.05*
Assimilative	-.34	.73	-.04		.16	.44	.03		1.03	.34	.25**	
Accommodative												
Adjust goal	1.18	.85	.09		1.12	.55	.14*		-.03	.43	-.01	
Let go of goal	-.71	1.49	-.04		-.27	.93	-.03		1.43	.72	.17*	
Block 4: General coping				.14***				.04*				.10***
Assimilative	-.17	.08	-.16*		-.03	.05	-.04		-.02	.04	.03	
Accommodation	-.36	.08	-.33***		-.14	.05	-.19*		.19	.04	.34***	
Total R^2				.37***				.28***				.30***

Note. $\Delta R^2 = R^2$ change.

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

rehabilitation professionals to the possibility that even clients who seem to have a very “accepting” life approach may not necessarily be able to apply this general attitude to specific goal contexts. Rehabilitation professionals may be particularly suited to support clients in more flexibly transitioning from assimilative to accommodative coping strategies for specific goals that may become out of reach.

When it came to the associations between assimilative and accommodative coping, the theoretical prediction of a somewhat antagonistic relationship between the two modes (e.g., Brandtstädter & Renner, 1990) was only partially supported. Assimilative and accommodative general coping tendencies showed a positive rather than a negative association. This may be because of one of two reasons—first, the positive association may reflect the broader person factor that some people generally tend to report more coping efforts than others, and second, conceptually speaking, adaptation to a chronic disability should trigger greater overall coping activity that would include both assimilative and accommodative coping modes. For goal-specific coping, however, we did find the expected moderate negative association; thus, here the coping direction was more likely to be either assimilative or accommodative. These findings provide critical guidance for rehabilitation professionals in that they underscore that the two coping modes can coexist in particular when it comes to one’s general outlook on life challenges, but that choosing one direction or the other may become more important in a concrete goal-specific context. Thus, rehabilitation professionals—who serve on the frontlines in helping clients identify their goals and develop relevant skills and strategies for attaining those goals—are also in the unique position to counsel clients on choosing the most adaptive coping direction for their various goals.

Finally, findings were consistent with previous work in demonstrating the benefits of both assimilative and accommodative cop-

ing processes (accommodation, in particular), in the population of individuals with visual disability (Boerner, 2004; Garnefski et al., 2010), and incrementally add to this prior work by providing insight into whether assimilative and accommodative coping were differentially used in general versus goal-specific contexts. Our hierarchical regressions confirmed the expectation that both goal-specific and general coping would explain unique variance in our mental health outcomes, over and above sociodemographic characteristics and several impairment indicators. We were able to replicate the particular benefits of a general accommodative life philosophy across three different mental health outcomes. However, our findings also suggest that reevaluating and adjusting concrete goals may be somewhat anxiety-provoking, perhaps because of the level of effort and uncertainty involved in this process. At the same time, there was evidence that both thoughts of letting go of a specific goal as well as greater use of assimilative efforts to pursue a particular goal were related to greater life satisfaction. This suggests that when dealing with concrete goals, either maintaining engagement with or letting the goal go brings greater contentment, and that a more general accommodative tendency can additionally be helpful.

Overall, the data underscore the fact that adaptation to visual disability requires flexible coping in both directions—goal engagement as well as goal adjustment or disengagement. Based on the present findings, we concur with the conclusion of others (e.g., Dunne et al., 2011), that a generally low accommodative coping capacity can be considered a risk factor for poor mental health. Yet, our findings also suggest that low levels of assimilative coping may be of concern in goal-specific contexts. It is possible that there is more protective potential for assimilative coping in dealing with concrete goals, and for accommodative coping as a general attitude toward life. Given this more nuanced and complicated picture of effective coping strategies and their links with

well-being in different coping contexts, support and counseling provided by rehabilitation professionals appears especially critical in helping clients consider and adopt a more varied and flexible coping repertoire tailored to their specific challenges and circumstances.

Several potential limitations of this research deserve mention. Because the participants were drawn from a pool of middle-aged applicants seeking services at a vision rehabilitation agency, this study has limited generalizability to visually impaired adults who do not seek out services, or to adults with other chronic impairments. However, it is not unlikely that similar coping patterns would be found in the context of other chronic disabilities. Therefore, future research investigating coping efforts in response to chronic impairments other than vision loss may be helpfully guided by the findings reported herein. In addition, because the goal-specific coping measure used was designed for the present study, it had not been previously validated and was limited in terms of number of items included and related psychometrics. As a result, findings in particular with regard to the unique contribution of goal-specific versus general coping (greater contribution of general compared with goal-specific coping) should be treated with caution, because the general coping tendencies scales were the psychometrically stronger measure. Furthermore, results regarding the individual effects of goal-specific accommodative coping on mental health should be considered tentative, because we relied on single items to represent reevaluation and letting go of goals. Last, we note that the present study was cross-sectional and that longitudinal data is needed to understand how coping in both general and goal-specific contexts changes and affects mental health and well-being over time.

However, this study presents a concerted effort to examine coping with visual disability using an existing theoretical model with detailed data on specific life goals and goal interference that is the first in the field, and yields new insights about coping that can benefit rehabilitation professionals who work with adults dealing with vision impairment. In particular, our results emphasize that optimal coping includes the flexible and varied endorsement of both assimilative and accommodative approaches, and that individuals who adopt a pattern of coping that involves investing resources to pursue specific goals while generally endorsing goal adjustment or disengagement as a life philosophy, may stand to benefit the most. Rehabilitation professionals could play an important role in helping clients determine for each important goal the extent to which pursuing it may be feasible, and then for feasible goals, assist clients on developing assimilative strategies to reach them. For goals that are no longer feasible, the rehabilitation objective then would be to help clients reevaluate or let go of the goal.

References

- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology, 56*(6), 893–897. doi:10.1037/0022-006X.56.6.893
- Boerner, K. (2004). Adaptation to disability among middle-aged and older adults: The role of assimilative and accommodative coping. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 59B*, P35–P42. doi:10.1093/geronb/59.1.P35
- Boerner, K., Brennan, M., Horowitz, A., & Reinhardt, J. P. (2010). Tackling vision-related disability in old age: An application of the life-span theory of control to narrative data. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 65B*, 22–31. [PMC2794889]. doi:10.1093/geronb/gbp098
- Boerner, K., & Cimarolli, V. R. (2005). Optimizing rehabilitation for adults with visual impairment: Attention to life goals and their links to well-being. *Clinical Rehabilitation, 19*, 790–798. doi:10.1191/0269215505cr893oa
- Boerner, K., & Jopp, D. (2007). Improvement/maintenance and reorientation as central features of coping with major life change and loss: Contributions of three life-span theories. *Human Development, 50*, 171–195. doi:10.1159/000103358
- Brandtstädter, J., & Renner, G. (1990). Tenacious goal pursuit and flexible goal adjustment: Explication and age-related analysis of assimilative and accommodative strategies of coping. *Psychology and Aging, 5*, 58–67. doi:10.1037/0882-7974.5.1.58
- Brandtstädter, J., & Rothermund, K. (2002). The life course dynamics of goal pursuit and goal adjustment: A two-process framework. *Developmental Review, 22*, 117–150. doi:10.1006/drev.2001.0539
- Center for the Study of Aging and Human Development. (1975). *Multidimensional functional assessment: The OARS methodology* (1st ed.) Durham, NC: Center for the Study of Aging and Human Development, Duke University.
- Cimarolli, V. R. (2006). Perceived overprotection and distress in adults with visual impairment. *Rehabilitation Psychology, 51*, 338–345. doi:10.1037/0090-5550.51.4.338
- Cimarolli, V. R., Boerner, K., & Wang, S. (2006). Life goals in vision rehabilitation: Are they addressed and how? *Journal of Visual Impairment and Blindness, 100*, 343–352.
- Dunne, E., Wrosch, C., & Miller, G. E. (2011). Goal disengagement, functional disability, and depressive symptoms in old age. *Health Psychology, 30*, 763–770. doi:10.1037/a0024019
- Garnefski, N., Kraaij, V., De Graaf, M., & Karels, L. (2010). Psychological intervention targets for people with visual impairments: The importance of cognitive coping and goal adjustment. *Disability & Rehabilitation, 32*, 142–147. doi:10.3109/09638280903071859
- Hall, N. C., Chipperfield, J. G., Heckhausen, J., & Perry, R. P. (2010). Control striving in older adults with serious health problems: A 9-year longitudinal study of survival, health, and well-being. *Psychology and Aging, 25*, 432–445. doi:10.1037/a0019278
- Horowitz, A., Brennan, M., & Reinhardt, J. P. (2005). Prevalence and risk factors for self-reported visual impairment among middle-age and older adults. *Research on Aging, 27*, 307–326. doi:10.1177/0164027504274267
- Horowitz, A., & Reinhardt, J. P. (2006). Adequacy of the mental health system in meeting the needs of adults who are visually impaired. *Journal of Visual Impairment & Blindness, 100*, 871–874.
- Horowitz, A., Reinhardt, J. P., & Kennedy, G. J. (2005). Major and subthreshold depression among older adults seeking vision rehabilitation services. *The American Journal of Geriatric Psychiatry, 13*, 180–187.
- Horowitz, A., Teresi, J. E., & Cassels, L. A. (1991). Development of a Vision Screening Questionnaire for older people. *Journal of Gerontological Social Work, 17*, 37–56. doi:10.1300/J083v17n03_04
- Judd, L. L., Paulus, M. P., Wells, K. B., & Rapaport, M. H. (1996). Socioeconomic burden of subsyndromal depressive symptoms and major depression in a sample of the general population. *The American Journal of Psychiatry, 153*, 1411–1417.
- Mitchell, J., & Bradley, C. (2006). Quality of life in age-related macular degeneration: A review of the literature. *Health and Quality of Life Outcomes, 4*, 97. doi:10.1186/1477-7525-4-97
- Nurmi, J. E. (1992). Age differences in adult life goals, concerns, and their temporal extension: A life course approach to future oriented motivation. *International Journal of Behavioral Development, 15*, 487–508.

- Owsley, C., McGwin, G., Jr., Lee, P. P., Wasserman, N., & Searcey, K. (2009). Characteristics of low-vision rehabilitation services in the United States. *Archives of Ophthalmology*, *127*, 681–689. doi:10.1001/archophthalmol.2009.55
- Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, *5*, 164–172. doi:10.1037/1040-3590.5.2.164
- Popivker, L., Wang, S. W., & Boerner, K. (2010). Eyes on the prize: Life goals in the context of disability in midlife. *Clinical Rehabilitation*, *24*, 1127–1135. doi:10.1177/0269215510371421
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401. doi:10.1177/014662167700100306
- Wheeler, R. J., Munz, D. C., & Jain, A. (1990). Life goals and general well-being. *Psychological Reports*, *66*, 307–312. doi:10.2466/pr0.1990.66.1.307
- Wrosch, C., Amir, E., & Miller, G. E. (2011). Goal adjustment capacities, coping, and subjective well-being: The sample case of caregiving for a family member with mental illness. *Journal of Personality and Social Psychology*, *100*, 934–46. doi:10.1037/a0022873

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Call for Nominations

The Publications and Communications (P&C) Board of the American Psychological Association has opened nominations for the editorships of **Behavioral Neuroscience**, **Journal of Applied Psychology**, **Journal of Educational Psychology**, **Journal of Personality and Social Psychology: Interpersonal Relations and Group Processes**, **Psychological Bulletin**, and **Psychology of Addictive Behaviors** for the years 2015–2020. Mark S. Blumberg, PhD, Steve W. J. Kozlowski, PhD, Arthur Graesser, PhD, Jeffrey A. Simpson, PhD, Stephen P. Hinshaw, PhD, and Stephen A. Maisto, PhD, ABPP, respectively, are the incumbent editors.

Candidates should be members of APA and should be available to start receiving manuscripts in early 2014 to prepare for issues published in 2015. Please note that the P&C Board encourages participation by members of underrepresented groups in the publication process and would particularly welcome such nominees. Self-nominations are also encouraged.

Search chairs have been appointed as follows:

- **Behavioral Neuroscience**, John Disterhoft, PhD
- **Journal of Applied Psychology**, Neal Schmitt, PhD
- **Journal of Educational Psychology**, Neal Schmitt, PhD, and Jennifer Crocker, PhD
- **Journal of Personality and Social Psychology: Interpersonal Relations and Group Processes**, David Dunning, PhD
- **Psychological Bulletin**, Norman Abeles, PhD
- **Psychology of Addictive Behaviors**, Jennifer Crocker, PhD, and Lillian Comas-Diaz, PhD

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Prepared statements of one page or less in support of a nominee can also be submitted by e-mail to Sarah Wiederkehr, P&C Board Search Liaison, at swiederkehrapa.org.

Deadline for accepting nominations is January 11, 2013, when reviews will begin.