

# The Self-Regulation Questionnaires

## Scale Description

**The Concepts of Self-Regulation.** SDT differentiates types of behavioral regulation in terms of the degree to which they represent autonomous or self-determined (versus controlled) functioning. Intrinsic motivation is the prototype of autonomous activity; when people are intrinsically motivated, they are by definition self-determined. Extrinsically motivated activity, in contrast, is often more controlled (i.e., less autonomous). However, SDT differentiates types of extrinsic motivation in terms of the degree to which it has been internalized, suggesting that the more fully it is internalized and integrated with one's self, the more it will be the basis for autonomous behavior. There are four different types of behavioral regulation, defined in terms of the degree to which the regulation of an extrinsically motivated activity has been internalized and integrated. They are external regulation, introjected regulation, identified regulation, and integrated regulation, in order from the least to the most fully internalized (see Ryan & Deci, 2000, for more on this). Introjection refers to taking in a regulation but not accepting it as one's own; identification refers to accepting the value of the activity as personally important, and integration refers to integrating that identification with other aspects of one's self. External and introjected regulation are considered relatively controlled forms of extrinsic motivation, whereas identified and integrated regulation are considered relatively autonomous. Finally, within SDT there is a concept of Amotivation, which means to be neither intrinsically nor extrinsically motivated--in other words, to be without intention or motivation for a particular behavior.

**The Self-Regulation Questionnaires** assess domain-specific individual differences in the types of motivation or regulation. That is, the questions concern the regulation of a particular behavior (e.g., exercising regularly) or class of behaviors (e.g., engaging in religious behaviors). The regulatory styles, while considered individual differences, are not "trait" concepts, for they are not general nor are they particularly stable. But neither are they "state" concepts, for they are more stable than typical states which fluctuate easily as a function of time and place. The format for these questionnaires was introduced by Ryan and Connell (1989). Each questionnaire asks why the respondent does a behavior (or class of behaviors) and then provides several possible reasons that have been preselected to represent the different styles of regulation or motivation. The first two questionnaires were developed for late-elementary and middle school children, and concern school work (SRQ-Academic) and prosocial behavior (SRQ-Prosocial). Their validation is described in the Ryan and Connell (1989) article. Since then, several others have been developed that are intended for adults. Those two, and five other SRQs are displayed in this section of the web site.

They are:

\* Academic Self-Regulation Questionnaire (SRQ-A)

- \* Prosocial Self-Regulation Questionnaire (SRQ-P)
- \* Treatment Self-Regulation Questionnaire (TSRQ)
- \* Learning Self-Regulation Questionnaire (SRQ-L)
- \* Exercise Self-Regulation Questionnaire (SRQ-E)
- \* Religion Self-Regulation Questionnaire (SRQ-R)
- \* Friendship Self-Regulation Questionnaire (SRQ-F)

**Scoring the Questionnaires.** Each participant gets a score on each subscale by averaging responses to each of the items that make up that subscale--for example, the average of all items representing introjected regulation would represent the score for that subscale. However, different of the self-regulation questionnaires have different numbers of subscales, depending on the following four considerations. First, fully integrating a behavioral regulation is very unlikely to have occurred during childhood or adolescence. Thus, the scales used with children do not have an integrated subscale. Second, some behaviors are not interesting in their own right, and thus would not be intrinsically motivated. Thus, questionnaires to assess regulatory styles for such behaviors (e.g., stopping smoking) do not have an intrinsic motivation subscale. Third, the concept of amotivation is relevant to some research questions and not to others, so the concept is included in some of the scales but not others. Fourth, some of the questionnaires, rather than having separate regulatory-style subscales have only two subscales: controlled regulation and autonomous regulation. This is done when the research questions being addressed can be adequately addressed with just the two “super” categories of regulation. In these scales, items representing external and introjected regulation make up the controlled subscale, and items representing identified, integrated, and/or intrinsic make up the autonomous subscale.

**Relative Autonomy Index.** Finally, it is worth noting that the subscale scores on the SRQ, regardless of the number of subscales in the particular scale, can be combined to form a Relative Autonomy Index (RAI). For example, the SRQ-Academic has four subscales: external, introjected, identified, and intrinsic. To form the RAI, the external subscale is weighted -2, the introjected subscale is weighted -1, the identified subscale is weighted +1, and the intrinsic subscale is weighted +2. In other words, the controlled subscales are weighted negatively, and the autonomous subscales are weighted positively. The more controlled the regulatory style represented by a subscale, the larger its negative weight; and the more autonomous the regulatory style represented by a subscale, the larger its positive weight.

**Summary of the Scoring Procedures.** We have used the self-regulatory style values in three ways in different analyses. First, we use each subscale score separately in the analyses so that participants have a score for each style. Second, we compute a Relative Autonomy Index by weighting the subscale scores and combining them (see, e.g., Grolnick & Ryan, 1989). Third, we form a score for controlled regulation by averaging across external and introjected items, and

a score for autonomous regulation by averaging across identified, integrated, and/or intrinsic items (e.g., Williams, Grow, Freedman, Ryan, & Deci, 1996).

It should be clear that new research questions may require slight adaptations of the existing questionnaire, or that new SRQs may need to be developed for new behaviors or domains. The important point is to remain true to the concept and to validate the adaptations fully. We are in agreement with Loevinger (1957) that psychological tests and surveys should serve as an aid in theoretical development, so any construct is in need of continual “bootstrapping.” Scales may be in need of adaptation as the research question changes.

**Note:** Kennon M. Sheldon, University of Missouri, Columbia (e-mail: sheldonk@missouri.edu) has developed a comparable approach to assessing self-regulation for personal strivings. Contact him for further information.

### References

Grolnick, W. S., & Ryan, R. M. (1989). Parent style associated with children’s self-regulation and competence in school. *Journal of Educational Psychology, 81*, 143-154.

Loevinger, J. (1957). Objective tests as instruments of psychological theory. *Psychological Reports, Monograph Supplement, 9* (1, Serial No. 3).

Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology, 57*, 749-761.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78.

Williams, G. C., Grow, V. M., Freedman, Z., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight-loss and weight-loss maintenance. *Journal of Personality and Social Psychology, 70*, 115-126.

# Academic Self-Regulation Questionnaire (SRQ-A)

This questionnaire concerns the reasons why children do their school work. The scale was developed for students in late elementary and middle school. (The comparable SRQ for adults is referred to as the Learning Self-Regulation Questionnaire.) Consequently, its format is slightly different from the format of the Self-Regulation Questionnaires intended for adults. First, the responses to each item are on a 4-point scale rather than a 7-point scale because we have found that more than 4 possible responses is not optimal for the children who complete the questionnaire who are as young as about 8 years of age. Second, we typically have the children respond right on the questionnaire by circling the correct response rather than using an answer sheet. Again, this is easier, especially when doing a group administration to a class of students. Of course it is more work for the researcher to get the information off the questionnaires, but it is worth the trade off. Third, there are more items on the SRQs for children than the SRQs for adults in order to ensure good reliability. Fourth, the “very true” response comes first for each item, whereas on the adult questionnaire it comes last. To score the scale: Very True is scored 4; Sort of True is scored 3; Not Very True is scored 2; and Not at All True is scored 1. This way, a higher score will indicate a higher level of endorsement of that regulatory style. The SRQ-A uses four subscales: external regulation, introjected regulation, identified regulation, and intrinsic motivation.

**Two versions of the scale.** There are two versions of the SRQ-A. The first version is the one that has used in many studies of school children. It asks four questions about why students do various school related behaviors. Each question is followed by several responses that represent the 4 regulatory styles used in this scale. Validation of this scale is presented in Ryan and Connell (1989). The second versions of the SRQ-A, which is a modification of the first, was created for students with Learning Disabilities. In a study of students with LD (Deci, Hodges, Pierson, & Tomassone, 1992), we found that the standard format was too difficult. So, rather than having one question with several responses, every item is formulated as a separate question. The items are still represent the responses to the same 4 questions as in the standard version of the scale, but they are written so the children will understand them more easily. Also, we changed the wording of the four responses to make them easier for the children. In this version, Always is scored 4; Most of the Time is scored 3; Sometimes is scored 2; and Never is scored 1. Scoring information for each version of the scale is after that version. First we present the standard version; then we present the version for students with LD.

## The Scale (standard version)

### WHY I DO THINGS

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Grade: \_\_\_\_\_

( ) Boy or Girl ( )

Teacher: \_\_\_\_\_

A. Why do I do my homework?

1. Because I want the teacher to think I'm a good student.

Very true      Sort of true      Not very true      Not at all true

2. Because I'll get in trouble if I don't.

Very true      Sort of true      Not very true      Not at all true

3. Because it's fun.

Very true      Sort of true      Not very true      Not at all true

4. Because I will feel bad about myself if I don't do it.

Very true      Sort of true      Not very true      Not at all true

5. Because I want to understand the subject.

Very true      Sort of true      Not very true      Not at all true

6. Because that's what I'm supposed to do.

Very true      Sort of true      Not very true      Not at all true

7. Because I enjoy doing my homework.

Very true      Sort of true      Not very true      Not at all true

8. Because it's important to me to do my homework.

Very true      Sort of true      Not very true      Not at all true

B. Why do I work on my classwork?

9. So that the teacher won't yell at me.

Very true      Sort of true      Not very true      Not at all true

10. Because I want the teacher to think I'm a good student.

Very true      Sort of true      Not very true      Not at all true

11. Because I want to learn new things.

Very true      Sort of true      Not very true      Not at all true

12. Because I'll be ashamed of myself if it didn't get done.

Very true      Sort of true      Not very true      Not at all true

13. Because it's fun.

Very true      Sort of true      Not very true      Not at all true

14. Because that's the rule.

Very true      Sort of true      Not very true      Not at all true

15. Because I enjoy doing my classwork.

Very true      Sort of true      Not very true      Not at all true

16. Because it's important to me to work on my classwork.

Very true      Sort of true      Not very true      Not at all true

C. Why do I try to answer hard questions in class?

17. Because I want the other students to think I'm smart.

Very true      Sort of true      Not very true      Not at all true

18. Because I feel ashamed of myself when I don't try.

Very true      Sort of true      Not very true      Not at all true

19. Because I enjoy answering hard questions.

Very true      Sort of true      Not very true      Not at all true

20. Because that's what I'm supposed to do.

Very true      Sort of true      Not very true      Not at all true

21. To find out if I'm right or wrong.

Very true      Sort of true      Not very true      Not at all true

22. Because it's fun to answer hard questions.

Very true      Sort of true      Not very true      Not at all true

23. Because it's important to me to try to answer hard questions in class.

Very true      Sort of true      Not very true      Not at all true

24. Because I want the teacher to say nice things about me.

Very true      Sort of true      Not very true      Not at all true

D. Why do I try to do well in school?

25. Because that's what I'm supposed to do.

Very true      Sort of true      Not very true      Not at all true

26. So my teachers will think I'm a good student

Very true      Sort of true      Not very true      Not at all true

27. Because I enjoy doing my school work well.

Very true      Sort of true      Not very true      Not at all true

28. Because I will get in trouble if I don't do well.

Very true      Sort of true      Not very true      Not at all true

29. Because I'll feel really bad about myself if I don't do well.

Very true      Sort of true      Not very true      Not at all true

30. Because it's important to me to try to do well in school.

Very true      Sort of true      Not very true      Not at all true

31. Because I will feel really proud of myself if I do well.

Very true      Sort of true      Not very true      Not at all true

32.      Because I might get a reward if I do well.

Very true      Sort of true      Not very true      Not at all true

**Scoring the SRQ-A (standard version).** First, you calculate the subscale score for each of the four subscales by averaging the items that make up that subscale. Very true is scored 4; Sort of true is scored 3; Not very true is scored 2; and Not at all true is scored 1. The four subscales are: external regulation, introjected regulation, identified regulation, and intrinsic motivation. Listed below are the item numbers associated with each of the four subscales.

- External Regulation: 2, 6, 9, 14, 20, 24, 25, 28, 32
- Introjected Regulation: 1, 4, 10, 12, 17, 18, 26, 29, 31
- Identified Regulation: 5, 8, 11, 16, 21, 23, 30
- Intrinsic Motivation: 3, 7, 13, 15, 19, 22, 27

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). To form the RAI for this scale, use the following formula to combine the subscale scores:

$$2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$$

\* \* \* \* \*

## The Scale (version for students with LD)

### Why I Do Things

Name \_\_\_\_\_

Age \_\_\_\_\_

Boy or Girl (circle one)

Teacher \_\_\_\_\_

1. I do my classwork so that the teacher won't yell at me.



- |  | Always | Most of the time | Sometimes | Never |
|--|--------|------------------|-----------|-------|
| 2. I do my classwork because I want the teacher to think I'm a good student.                 | Always | Most of the time | Sometimes | Never |
| 3. I do my classwork because I want to learn new things.                                     | Always | Most of the time | Sometimes | Never |
| 4. I do my classwork because I'll feel bad about myself if it doesn't get done.              | Always | Most of the time | Sometimes | Never |
| 5. I do my classwork because it's fun.   | Always | Most of the time | Sometimes | Never |
| 6. I do my classwork because that's the rule.  | Always | Most of the time | Sometimes | Never |
| 7. I enjoy doing my classwork.   | Always | Most of the time | Sometimes | Never |
| 8. I try to answer hard questions in class because I want the other kids to think I'm smart. | Always | Most of the time | Sometimes | Never |
| 9. I try to answer hard questions because I'll feel bad about myself if I don't try.         | Always | Most of the time | Sometimes | Never |
| 10. I try to answer hard questions because it's fun to answer hard questions.                | Always | Most of the time | Sometimes | Never |
| 11. I try to answer hard questions because that's what I am supposed to do.                  | Always | Most of the time | Sometimes | Never |
| 12. I try to answer hard questions to find out if I'm right or wrong.                        | Always | Most of the time | Sometimes | Never |

13. I try to do well in school because that's what I am supposed to do.

Always                                      Most of the time                                      Sometimes                                      Never

14. I try to do well in school so my teachers will think I'm a good student.

Always                                      Most of the time                                      Sometimes                                      Never

15. I try to do well in school because I like doing a good job on my school work.

Always                                      Most of the time                                      Sometimes                                      Never

16. I try to do well in school because I will get in trouble if I don't.

Always                                      Most of the time                                      Sometimes                                      Never

17. I try to do well in school because I'll feel really bad about myself if I don't do well.

Always                                      Most of the time                                      Sometimes                                      Never

**Scoring the SRQ-A (version for students with LD).** As with the standard version of the SRQ-A, you first calculate the subscale score for each of the four subscales by averaging the items that make up that subscale. Always is scored 4; Most of the time is scored 3; Sometimes is scored 2; and Never is scored 1. The four subscales are: external regulation, introjected regulation, identified regulation, and intrinsic motivation. There are fewer items on this version than on the standard version, because students with LD typically have a shorter attention span. Listed below are the item numbers associated with each of the four subscales.

- External Regulation: 1, 6, 11, 13, 16
- Introjected Regulation: 2, 4, 8, 9, 14, 17
- Identified Regulation: 3, 12, 15
- Intrinsic Motivation: 5, 7, 10

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). To form the RAI for this scale, use the following formula to combine the subscale scores:

$$2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$$

\* \* \* \* \*

### **Reference for original SRQ-A (the standard version)**

Ryan, R.M., & Connell, J.P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, *57*, 749-761.

### **Reference for the adapted SRQ-A (the version for students with LD)**

Deci, E. L., Hodges, R., Pierson, L., & Tomassone, J. (1992). Autonomy and competence as motivational factors in students with learning disabilities and emotional handicaps. *Journal of Learning Disabilities*, *25*, 457-471.

### **Other articles that have used the SRQ-A**

Grolnick, W. S., Ryan, R. M., & Deci, E. L. (1991). The inner resources for school performance: Motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology*, *83*, 508-517.

Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, *81*, 143-154.

Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology*, *52*, 890-898.

Miserandino, M. (1996). Children who do well in school: Individual differences in perceived competence and autonomy in above-average children. *Journal of Educational Psychology*, *88*, 203-214.

Patrick, B. C., Skinner, E. A., & Connell, J. P. (1993). What motivates children's behavior and emotion? Joint effects of perceived control and autonomy in the academic domain. *Journal of Personality and Social Psychology*, *65*, 781-791.

### **A variant of the SRQ-A has been used in Japan, as reported in the following articles**

Hayamizu, T. (1997). Between intrinsic and extrinsic motivation: Examination of reasons for academic study based on the theory of internalization. *Japanese Psychological Research*, *39*, 98-108.

Yamauchi, H., & Tanaka, K. (1998). Relations of autonomy, self-referenced beliefs and self-regulated learning among Japanese children. *Psychological Reports*, *82*, 803-816.

# Prosocial Self-Regulation Questionnaire (SRQ-P)

This questionnaire concerns the reasons why children engage in various prosocial behaviors. The scale was developed for children in late elementary and middle school and uses the same format as the Academic Self-Regulation Questionnaire (SRQ-A), which is the other SRQ developed for children. As with the SRQ-A, the responses on this SRQ-P are on a 4-point scale (rather than the 7-point scale used for adults), and the very true response comes first for each item, so the scale is scored as follows: Very True is scored 4; Sort of True is scored 3; Not Very True is scored 2; and Not at All True is scored 1. This way, a higher score will indicate a higher level of endorsement of that regulatory style. The SRQ-P uses three subscales: external regulation, introjected regulation, and identified regulation. Because these kinds of behaviors result from internalization rather than being done naturally, there is not an intrinsic motivation subscale to this questionnaire.

## The Scale

### Why I Do Some Behaviors

These questions are about the reasons you do things. Different kids have different reasons. We want to know how true each of these reasons is for you.

#### Why do you keep a promise to friends?

- |    |  |           |              |               |                 |
|----|--|-----------|--------------|---------------|-----------------|
| 1. | So my friends will like me.                        | very true | sort of true | not very true | not at all true |
| 2. | Because I'd feel like a bad person if I didn't.    | very true | sort of true | not very true | not at all true |
| 3. | Because my friends will get made at me if I don't. | very true | sort of true | not very true | not at all true |
| 4. | Because I think it's important to keep promises.   | very true | sort of true | not very true | not at all true |
| 5. | Because I don't like breaking promises.            | very true | sort of true | not very true | not at all true |

#### Why do you not make fun of another child for making a mistake?

- |     |  |           |              |               |                 |
|-----|--|-----------|--------------|---------------|-----------------|
| 6.  | Because if I do, I'll get in trouble.                | very true | sort of true | not very true | not at all true |
| 7.  | Because I think it's important to be nice to others. | very true | sort of true | not very true | not at all true |
| 8.  | Because I'd feel ashamed of myself after I did it.   | very true | sort of true | not very true | not at all true |
| 9.  | Because other kids won't like me if I do that.       | very true | sort of true | not very true | not at all true |
| 10. | Because I don't like to be mean.                     | very true | sort of true | not very true | not at all true |

**Why don't you hit someone when you're mad at them?**

- |     |   |           |              |               |                 |
|-----|---|-----------|--------------|---------------|-----------------|
| 11. | Because I'll get in trouble if I do.        | very true | sort of true | not very true | not at all true |
| 12. | Because I want other kids to like me.       | very true | sort of true | not very true | not at all true |
| 13. | Because I don't like to hit others.         | very true | sort of true | not very true | not at all true |
| 14. | Because I wouldn't want to hurt someone.    | very true | sort of true | not very true | not at all true |
| 15. | Because I'd feel bad about myself if I did. | very true | sort of true | not very true | not at all true |

**Why do you try to be nice to other kids?**

- |     |   |           |              |               |                 |
|-----|---|-----------|--------------|---------------|-----------------|
| 16. | Because if I don't, other kids won't like me.       | very true | sort of true | not very true | not at all true |
| 17. | Because I'll get in trouble if I don't.             | very true | sort of true | not very true | not at all true |
| 18. | Because I think it's important to be a nice person. | very true | sort of true | not very true | not at all true |

19. Because I will feel bad about myself if I don't.  
 very true      sort of true      not very true      not at all true
20. Because I don't like being mean.  
 very true      sort of true      not very true      not at all true

**Why would you help someone who is in distress?**

21. Because I think it's important to give help when it's needed.  
 very true      sort of true      not very true      not at all true
22. Because I could get in trouble if I didn't.  
 very true      sort of true      not very true      not at all true
23. Because I'd feel bad about myself if I didn't.  
 very true      sort of true      not very true      not at all true
24. Because I want people to like me.  
 very true      sort of true      not very true      not at all true
25. Because it is satisfying to help others.  
 very true      sort of true      not very true      not at all true

**Scoring Information.** Calculate scores for Introjected Regulation and Identified Regulation by averaging the items within those subscales.

External Regulation: 3, 6, 11, 17, 22

Introjected Regulation: 1, 2, 8, 9, 12, 15, 16, 19, 23, 24

Identified Regulation: 4, 5, 7, 10, 13, 14, 18, 20, 21, 25

**Validation Article**

Ryan, R.M., & Connell, J.P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749-761.

# Treatment Self-Regulation Questionnaire (TSRQ)

The TSRQ concerns why people engage in some healthy behavior, enter treatment for a medical condition, try to change an unhealthy behavior, follow a treatment regimen, or engage in some other health-relevant behavior. Each version of the questionnaire assesses the degree to which a person's motivation for the health behaviors is relatively autonomous, so the wording varies somewhat depending on what behaviors are being investigated. Additional versions of the TSRQ can be found in the Health Care, Self-Determination Theory section of the self-determination theory web site. The versions of the TSRQ presented here or as part of the Health-Care SDT packet can be adapted as needed for studying other behaviors.

In most versions of the TSRQ, there are two subscales: Autonomous Regulation and Controlled Regulation. In some cases a subscale for amotivation has also been included, but the Amotivation subscale has been used in very few studies so is not included in the version of the TSRQ presented here. A version that does include Amotivation can be found in the TSRQ that appears in the Health Care, Self-Determination Theory section of this web site.

The TSRQ was first used for "behaving in a healthy way" in Williams, Grow, Freedman, Ryan, and Deci (1996), and has been used for "control my glucose level" in a study of patients with diabetes (Williams, Freedman, & Deci, 1998), as well as for various other behaviors such as "not smoking" (Williams, Cox, Kouides, & Deci, 1999).

There are three versions of the scale presented here. First is the version concerning health behaviors for patients with diabetes. It has two stems and a total of 19 items. Second is the version concerning participation in a very low-calorie, medically supervised weight-loss program by morbidly obese patients. It has four stems and a total of 18 items. Third is a version that was used in the same study of the weight-loss program, but was given several months into the program. It has two stems and a total of 13 items. Whereas the first of the two scales concerning the weight-loss program was given at the beginning of the program to assess motivation for entering the program, the second version was given later to assess motivation for continuing to participate in the program.

**General Scoring Information for the TSRQ.** Typically, the responses on the autonomous items are averaged to form the autonomous regulation score for the target behavior and the responses on the controlled items are averaged to form the controlled regulation score for the target behavior. These two subscale scores are often used separately, but at times they have been combined into a Relative Autonomy Index (RAI) by subtracting the average for Controlled Regulation from the average for Autonomous Regulation. Following each of the three versions of the scale presented below is a key to which items are on the autonomy subscale and which on the controlled subscale. One will note that there are typically more controlled items than autonomous items. This is because there are many different kinds of controlled reasons for

doing a behavior, so to obtain adequate reliability for the controlled subscale, more items are typically needed.

## The Scale

### Treatment Questionnaire Concerning Diabetes

There are a variety of reasons why patients take their medications, check their glucose, follow their diet, or exercise regularly. Please consider the following behaviors and indicate how true each of these reason is for you. The scale is:

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

**A. I take my medications for diabetes and/or check my glucose because:**

1. Other people would be mad at me if I didn't.
2. I find it a personal challenge to do so.
3. I personally believe that controlling my diabetes will improve my health.
4. I would feel guilty if I didn't do what my doctor said.
5. I want my doctor to think I'm a good patient.
6. I would feel bad about myself if I didn't.
7. It's exciting to try to keep my glucose in a healthy range.
8. I don't want other people to be disappointed in me.

**B. The reason I follow my diet and exercise regularly is that:**



9. Other people would be upset with me if I didn't.
10. I personally believe that these are important in remaining healthy.
11. I would be ashamed of myself if I didn't.
12. It is easier to do what I'm told than to think about it.
13. I've carefully thought about my diet and exercising and believe it's the right thing to do.
14. I want others to see that I can follow my diet and stay fit.
15. I just do it because my doctor said to.
16. I feel personally that watching my diet and exercising are the best things for me.
17. I'd feel guilty if I didn't watch my diet and exercise.
18. Exercising regularly and following my diet are choices I really want to make.
19. It's a challenge to learn how to live with diabetes.

### **Scoring this version of the TSRQ**

To calculate the two subscale scores, average the items on that subscale. They are:

Autonomous Regulation: 2, 3, 7, 10, 13, 16, 18, 19

Controlled Regulation: 1, 4, 5, 6, 8, 9, 11, 12, 14, 15, 17

\* \* \* \* \*

### **Treatment Questionnaire Concerning Entering the Weight Loss Program**

There are a variety of reasons why patients decide to enter a weight-loss program such as this and follow its procedures. The items on this questionnaire are broken into four groups. Please read the statement at the beginning of each group and then consider the reasons that follow it in terms of how true that reason is for you. The scale is:



- 14. I am worried that I will get in trouble with the staff if I don't follow all the guidelines.
- 15. I'll feel guilty if I don't comply with all the procedures.
- 16. I want others to see that I am really trying to lose weight.
- 17. I believe they will help me solve my problem.
- 18. It's important to me that my efforts succeed.

**Scoring this version of the TSRQ**

To calculate the two subscale scores, average the items on that subscale. They are:

Autonomous Regulation: 3, 4, 9, 13, 17, 18

Controlled Regulation: 1, 2, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16

\* \* \* \* \*

**Treatment Questionnaire Concerning Continued Program Participation**

The following questions relate to your reasons for continuing to participate in the weight-loss program. Different people have different reasons for continuing in such a program, and we want to know how true each of these reasons is for you. There are two groups of questions. The questions in each group pertain to the sentence that begins that group.

Please indicate how true each reason is for you, using the following scale:

1	2	3	4	5	6	7
not at all true			somewhat true			very true

**A. I have remained in treatment because:**

1. I would have felt bad about myself if I didn't.
2. Others would have been angry at me if I didn't.
3. I would have felt like a failure if I didn't.
4. I feel like it's the best way to help myself.
5. People would think I'm a weak person if I didn't.
6. I have chosen not to leave the program.
7. It is a challenge to accomplish my goal.
8. I have invested so much money in this program.

**B. I have been following the procedures of the program because:**

9. I believe they help me solve my problem.
10. I have been worried that I would get in trouble with the staff if I didn't follow all the guidelines.
11. I want others to see that I am really trying to lose weight.
12. It is important to me that my efforts succeed.
13. I feel guilty if I don't comply with all the procedures.

**Scoring this version of the TSRQ**

To calculate the two subscale scores, average the items on that subscale. They are:

Autonomous Regulation: 4, 6, 7, 9, 12

Controlled Regulation: 1, 2, 3, 5, 8, 10, 11, 13

\* \* \* \* \*

# Related Scales

## Treatment Motivation Questionnaire

Ryan, Plant, and O'Malley (1995) were the first to use the SDT approach to study motivation for "entering treatment." In their study of alcoholics, some participants had been mandated by the courts to attend the treatment program. Thus, there was an important set of reasons for participating that is not present in most settings where people are trying to behave in healthier ways or participating in health-related treatment. The scale they developed was referred to as the Treatment Motivation Questionnaire (TMQ), and the Treatment Self-Regulation Questionnaire (TSRQ) was subsequently derived from it. The original TMQ was also used in one other study, namely a study of people attending a methadone clinic (Zeldman, Ryan, & Fiscella, 1999).

The TMQ has two motivation factors: (a) internal--which includes both introjected and identified items; and (b) external--which is merely external items. The reason for this different alignment is clearly that the external reasons were so much imposed from the outside--were so coercive--that the two types of internal motivation were more similar than introjection was to identification; whereas in the more typical settings in which the TSRQ is used, the introjection items are closer in psychological meaning to external regulation than they are to identification. Theoretically, this is not surprising because external regulation is on one side of introjected regulation on the self-determination continuum while identified regulation is on the other side. Furthermore, the TMQ has two other subscales, formed factor analytically: a Help Seeking subscale and a Confidence in Treatment subscale.

## The TMQ Scale

This questionnaire concerns people's reasons for entering treatment and their feelings about treatment. Participation is voluntary, so you do not have to fill it out if you don't want to. Different people have different reasons for entering treatment, and we want to know how true each of these reasons is for you. Please indicate how true each reason is for you, using the following scale:

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

### A. I came for treatment at the clinic because:

1. I really want to make some changes in my life.

2. I won't feel good about myself if I don't get some help.
3. I was referred by the legal system.
4. I feel so guilty about my problem that I have to do something about it.
5. It is important to me personally to solve my problems.

**B. If I remain in treatment it will probably be because:**

6. I'll get in trouble if I don't.
7. I'll feel very bad about myself if I don't.
8. I'll feel like a failure if I don't.
9. I feel like it's the best way to help myself.
10. I don't really feel like I have a choice about staying in treatment.
11. I feel it is in my best interests to complete treatment.

**C. Rate each of the following in terms of how true each statement is for you.**

12. I came to treatment now because I was under pressure to come.
13. I am not sure this program will work for me.
14. I am confident this program will work for me.
15. I decided to come to treatment because I was interested in getting help.
16. I'm not convinced that this program will help me stop drinking.
17. I want to openly relate with others in the program.
18. I want to share some of my concerns and feelings with others.
19. It will be important for me to work closely with others in solving my problem.
20. I am responsible for this choice of treatment.
21. I doubt that this program will solve my problems.
22. I look forward to relating to others who have similar problems.

23. I chose this treatment because I think it is an opportunity for change.
24. I am not very confident that I will get results from treatment this time.
25. It will be a relief for me to share my concerns with other program participants.
26. I accept the fact that I need some help and support from others to beat my problem.

**Scoring the TMQ.** Calculate the four subscale scores by averaging the responses for item in that subscale. The external reasons and internalized reasons are the subscales that relate most directly to self-determination theory.

External Reasons: 3, 6, 10, 12

Internalized Reasons: 1, 2, 4, 5, 7, 8, 9, 11, 15, 20, 23

Help Seeking: 17, 18, 19, 22, 25, 26

Confidence: 13(R), 14, 16(R), 21(R), 24(R) **Note:** An (R) after items in the Confidence subscale means that the item should be reverse scored before averaging it with other items in the subscale. To do that, subtract the person's response from 8. Thus, for example, a 3 becomes a 5. This way, a higher score means more confidence in treatment.

## References concerning the TMQ

Ryan, R. M., Plant, R. W., & O'Malley, S. (1995). Initial motivations for alcohol treatment: Relations with patient characteristics, treatment involvement and dropout. *Addictive Behaviors, 20*, 279-297.

Zeldman, A., Ryan, R. M., & Fiscella, K. (1999). Attitudes, beliefs and motives in addiction recovery. Unpublished manuscript, University of Rochester.

\* \* \* \* \*

## The Motivation for Therapy Scale

The TSRQ has been adapted by Pelletier, Tuson, and Haddad (1997) for motivation for psychotherapy. Contact Luc G. Pelletier, University of Ottawa (e-mail: social@uottawa.ca) for further information about it.

Pelletier, L. G., Tuson, K. M., & Haddad, N. K. (1997). Client Motivation for Therapy Scale: A measure of intrinsic motivation, extrinsic motivation, and amotivation for therapy. *Journal of Personality Assessment*, 68, 414-435.



# Learning Self-Regulation Questionnaire (SRQ-L)

This questionnaire concerns the reasons why people learn in particular settings such as a college or medical school course. Whereas the Academic Self-Regulation Questionnaire is for use with children, the Learning Self-Regulation Questionnaire is for older students. It asks three questions about why people engage in learning-related behaviors. This questionnaire was formed with just two subscales: Controlled Regulation and Autonomous Regulation. Thus, the responses that are provided are either controlled (i.e., external or introjected regulation) or autonomous (identified regulation or intrinsic motivation). Because the scale was designed to have just the two “super” categories of regulation, there was no attempt to have the same number of items from each regulatory style (e.g., identified and intrinsic), and there was no psychometric work done on the individual regulatory styles. The validation was done only at the level of the two “super” categories.

The scale, which is presented below in two slightly different versions, was developed for use in a study conducted in a medical school course referred to as Organ Systems, in which students learn to do medical interviewing (Williams & Deci, 1996). It is the first of the two versions presented. The scale was adapted slightly for college students learning organic chemistry (Black & Deci, 2000), and that version is presented second. It is essentially the same scale, although two items were dropped for the sake of brevity. The questionnaire can be adapted as needed to refer to the particular course or program being studied. Following each version of the scale is information about scoring it.

## The Scale

### Learning Questionnaire

The following questions relate to your reasons for participating in the interviewing class. Different people have different reasons for participating in such a class, and we want to know how true each of these reasons is for you. There are three groups of items, and those in each group pertain to the sentence that begins that group. Please indicate how true each reason is for you using the following scale:

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

#### A. I will participate actively in the organ systems classes:

1. Because I feel like it's a good way to improve my skills and my understanding of patients.

2. Because others would think badly of me if I didn't.
3. Because learning to interview well is an important part of becoming a doctor.
4. Because I would feel bad about myself if I didn't study this approach.

**B. I am likely to follow my instructor's suggestions for interviewing:**

5. Because I would get a good grade if I do what he/she suggests.
6. Because I believe my instructor's suggestions will help me interview effectively.
7. Because I want others to think that I am a good interviewer.
8. Because it's easier to do what I'm told than to think about it.
9. Because it's important to me to do well at this.
10. Because I would probably feel guilty if I didn't comply with my instructor's suggestions.

**C. The reason that I will continue to broaden my interviewing skills is:**

11. Because it's exciting to try new ways to work interpersonally with my patients.
12. Because I would feel proud if I did continued to improve at interviewing.
13. Because it's a challenge to really understand what the patient is experiencing.
14. Because it's interesting to use the interview to try to identify what disease the patient has.

**Scoring information for this SRQ-L (interviewing).**

Begin by calculating the two subscale scores by averaging the items on that subscale. They are:

Autonomous Regulation: 1, 3, 6, 9, 11, 13, 14  
Controlled Regulation: 2, 4, 5, 7, 8, 10, 12

In past studies, the alpha reliabilities for these two subscales have been approximately 0.75 for controlled regulation and 0.80 for autonomous regulation. Analyses can be done with the two separate subscales, or a Relative Autonomy Index can be formed by subtracting the controlled subscale score from the autonomous subscale score.

\* \* \* \* \*

## Reasons for Learning Questionnaire

The following questions relate to your reasons for participating actively in your organic chemistry class. Different people have different reasons for their participation in such a class, and we want to know *how true* each of the reasons is for you. Please use the following scale to indicate how true each reason is for you:

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

### A. I will participate actively in organic chemistry:

1. Because I feel like its a good way to improve my understanding of the material.
2. Because others might think badly of me if I didn't.
3. Because I would feel proud of myself if I did well in the course.
4. Because a solid understanding of chemistry is important to my intellectual growth.

### B. I am likely to follow my instructor's suggestions for studying chemistry:

5. Because I would get a bad grade if I didn't do what he/she suggests.
6. Because I am worried that I am not going to perform well in the course.
7. Because its easier to follow his/her suggestions than come up with my own study strategies.
8. Because he/she seems to have insight about how best to learn the material.

### C. The reason that I will work to expand my knowledge of chemistry is:

9. Because its interesting to learn more about the nature of chemistry.
10. Because its a challenge to really understand how to solve chemistry problems.
11. Because a good grade in chemistry will look positive on my record.
12. Because I want others to see that I am intelligent.

### **Scoring information for this SRQ-L (chemistry).**

Begin by calculating the two subscale scores by averaging the items on that subscale. They are:

Autonomous Regulation: 1, 4, 8, 9, 10

Controlled Regulation: 2, 3, 5, 6, 7, 11, 12

In past studies, the alpha reliabilities for these two subscales have been approximately 0.75 for controlled regulation and 0.80 for autonomous regulation. Analyses can be done with the two separate subscales, or a Relative Autonomy Index can be formed by subtracting the controlled subscale score from the autonomous subscale score.

\* \* \* \* \*

### **References concerning the SRQ-L**

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education*, 84, 740-756.

Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, 70, 767-779.

# Exercise Self-Regulation Questionnaire (SRQ-E)

This questionnaire concerns the reasons why a person exercises regularly, does gymnastics, works out, or engages in other such physical activities. It is structured so that it asks one questions and provides responses that represent external regulation, introjected regulation, identified regulation, and intrinsic motivation. The basic issue concerns the degree to which one feels autonomous with respect to exercising or engaging in physical activity. Below are three versions of the scale, one each for working out, exercising regularly, and doing gymnastics. Each one is followed by information about scoring it. These questionnaire are slightly different from each other not only in terms of the question asked but also in terms of the items. The items are, of course, very similar--that is the introjected items on one scale are similar to the introjected items on the other scales. However, the three versions were developed by different researchers, and it seems that they are wholly comparable scales. Several studies using these questionnaires have recently been conducted, but none has yet been written for publication. Thus, at this time, there are no published research reports that have used these scales.

## The Scales

### Motivation for Working Out

There are a variety of reasons why people work out. Please indicate how true each of these reason is for why you work out. The scale is:

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

### Why do you work out?

1. Because I simply enjoy working out.
2. Because working out is important and beneficial for my health and lifestyle.
3. Because I would feel bad about myself if I didn't do it.
4. Because it is fun and interesting.
5. Because others like me better when I am in shape.

6. Because I'd be afraid of falling too far out of shape.
7. Because it helps my image.
8. Because it is personally important to me to work out.
9. Because I feel pressured to work out.
10. Because I have a strong value for being active and healthy.
11. For the pleasure of discovering and mastering new training techniques.
12. Because I want others to see me as physically fit.

**Scoring the SRQ-E.** To score this questionnaire, first calculate the subscale scores for each of the four subscales: external regulation, introjected regulation, identified regulation, and intrinsic motivation. To do that, average the responses to each of the subscale's items. Listed below are the item numbers associated with each of the four subscales.

External Regulation: 5, 7, 12  
 Introjected Regulation: 3, 6, 9  
 Identified Regulation: 2, 8, 10  
 Intrinsic Motivation: 1, 4, 11

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). To form the RAI for this scale, use the following formula to combine the subscale scores:

$$2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$$

\* \* \* \* \*

### **Motivation for Gymnastics**

There are a variety of reasons why people do gymnastics. Please indicate how true each of these reason is for why you do gymnastics. The scale is:

1      2      3      4      5      6      7  
not at all      somewhat      very  
true      true      true

### Why do you practice gymnastics?

1. For the pleasure I feel when I practice gymnastics.
2. I used to have good reasons for doing gymnastics, but now I am asking myself if I should continue doing it.
3. I would feel bad about myself if I was not taking time to do gymnastics.
4. It is a good way to get exercise.
5. My parents or other family members give me money or other rewards when I do it.
6. For the excitement I feel when I am really involved in gymnastics.
7. I learn valuable lessons from gymnastics.
8. It is absolutely necessary for me to do gymnastics to feel good about myself.
9. It is not clear to me anymore; I don't really think gymnastics is my sport.
10. My parents, other family members, or friends tell me to do it.
11. For the pleasure of discovering new techniques.
12. I'm not sure why I still practice gymnastics, I don't seem to be going anywhere in it.
13. I think gymnastics is a useful way to stay healthy.
14. My parents, family, or friends would be mad if I didn't practice gymnastics anymore.
15. I would feel awful if I didn't do gymnastics anymore.

**Scoring the SRQ-E.** To score this questionnaire, first calculate the subscale scores for each of the four subscales: amotivation, external regulation, introjected regulation, identified regulation, and intrinsic motivation. To do that, average the responses to each of the subscale's items. Listed below are the item numbers associated with each of the four subscales.

Amotivation: 2, 9, 12  
 External Regulation: 5, 10, 14  
 Introjected Regulation: 3, 8, 15  
 Identified Regulation: 4, 7, 13  
 Intrinsic Motivation: 1, 6, 11

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). Amotivation is not used in the RAI, because the RAI concerns the degree to which one's motivation is self-determined, and the amotivation subscale assesses not being motivated. To form the RAI for this scale, use the following formula to combine subscale scores:

$$2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$$

\*\*\*\*\*

### Motivation for Exercise

There are a variety of reasons why people exercise regularly. Please indicate how true each of these reason is for why you exercise regularly. The scale is:

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

#### I try to exercise on a regular basis:

1. Because I would feel bad about myself if I did not.
2. Because others would be angry at me if I did not.
3. Because I enjoy exercising.
4. Because I would feel like a failure if I did not.
5. Because I feel like it's the best way to help myself.
6. Because people would think I'm a weak person if I did not.
7. Because I feel like I have no choice about exercising; others make me do it.



8. Because it is a challenge to accomplish my goal.
9. Because I believe exercise helps me feel better.
10. Because it's fun.
11. Because I worry that I would get in trouble with others if I did not.
12. Because it feels important to me personally to accomplish this goal.
13. Because I feel guilty if I do not exercise regularly.
14. Because I want others to acknowledge that I am doing what I have been told I should do.
15. Because it is interesting to see my own improvement.
16. Because feeling healthier is an important value for me.

**Scoring the SRQ-E.** To score this questionnaire, first calculate the subscale scores for each of the four subscales: external regulation, introjected regulation, identified regulation, and intrinsic motivation by averaging the responses to each of the subscale's items. Listed below are the item numbers associated with each of the four subscales.

External Regulation: 2, 7, 11, 14

Introjected Regulation: 1, 4, 6, 13

Identified Regulation: 5, 9, 12, 16

Intrinsic Motivation: 3, 8, 10, 15

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). To form the RAI for this scale, use the following formula to combine the subscale scores:

$$2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$$

# Religious Self-Regulation Questionnaire (SRQ-R)

## Also called Christian Religious Internalization Scale (CRIS)

This questionnaire concerns the reasons why a person engages in religious behaviors. The questions were written for research with a Christian population, but could be easily adapted for other religions. The questionnaire asks why people engage in four religious behaviors, each of which is followed by three reasons. In all, there are 12 items on the SRQ-R. The questionnaire was developed and validated by Ryan, Rigby, and King, (1993). There is a long form of the questionnaire with 48 items, but analyses revealed that the current 12-item version is as psychometrically sound as the longer version and is far more economical. The scale has only two subscales: Introjected Regulation and Identified Regulation. Work with the longer scale revealed that these two subscales represented the dynamically meaningful reasons why people engage in religious behaviors and that the external regulation and intrinsic motivation subscales did not add to the validity of the scale. Below is the actual scale, followed by information about scoring.

## The Scale

### Religious Behaviors

This questionnaire has four statements, each of which is followed by three possible responses. Please read the first statement, and then consider each response. Indicate how true each response is for you, using the following scale.

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

#### A. One reason I think it's important to actively share my faith with others is:

1. Because God is important to me and I'd like other people to know about Him too.
2. Because I would feel bad about myself if I didn't.
3. Because I want other Christians to approve of me.

#### B. When I turn to God, I most often do it because:

4. I enjoy spending time with Him.
5. I would feel guilty if I didn't.
6. I find it is satisfying to me.

**C. A reason I think praying by myself is important is:**

7. Because if I don't, God will disapprove of me.
8. Because I enjoy praying.
9. Because I find prayer satisfying.

**D. An important reason why I attend church is:**

10. Because one is supposed to go to church.
11. By going to church I learn new things.
12. Because others would disapprove of me if I didn't.

**Scoring information.** Calculate scores for Introjected Regulation and Identified Regulation by averaging the items within those subscales.

Identified Regulation: 1, 4, 6, 8, 9, 11

Introjected Regulation: 2, 3, 5, 7, 10, 12

**Validation article**

Ryan, R. M., Rigby, S., & King, K. (1993). Two types of religious internalization and their relations to religious orientations and mental health. *Journal of Personality and Social Psychology*, 65, 586-596.

**The SRQ-R is reviewed and reproduced in**

Hill, P. C., & Hood, R. W., Jr. (Eds.) (1999). *Measures of religiosity* (pp. 124-127). Birmingham, AL: Religious Education Press.

# Friendship Self-Regulation Questionnaire (SRQ-F)

This questionnaire concerns the reasons why a person is in a particular friendship. It asks four questions about being friends with a particular person, and provides responses that represent external regulation, introjected regulation, identified regulation, and intrinsic motivation. The basic issue, of course, concerns the degree to which one feels autonomous with respect to participating in the friendship. Below is the actual scale, followed by information about scoring.

## The Scale

### Being Friends

This questionnaire has four questions, and each questions is followed by a set of possible answers. Please read the first question, and then consider each response. Indicate how true each response is for you in the particular friendship you have selected using the following scale.

1	2	3	4	5	6	7
not at all			somewhat			very
true			true			true

A. Why am I close friends with this person now?

1. Because being friends with him/her helps me feel important.
2. Because I enjoy the numerous crazy and amusing moments that we share.
3. Because my friend would be upset if I ended the relationship.
4. Because I feel a lot of freedom and personal satisfaction in our friendship.
5. Because I would feel guilty if I withdrew from the friendship.
6. Because he/she is someone I really enjoy sharing emotions and special events with.
7. Because this person really wants me to be a close friend.
8. Because my commitment to him/her is personally very important to me.

B. Why do I spend time with my friend?

9. Because my friend would get mad at me if I didn't.
10. Because it is fun spending time with him/her.
11. Because I think it is what friends are supposed to do.
12. Because I really value spending time with my friend.

C. Why do I listen to my friend's problems, or to what my friend has to say?

13. Because it's interesting and satisfying to be able to share like that.
14. Because I would feel guilty if I did not.
15. Because my friend praises me and makes me feel good when I do.
16. Because I really value getting to know my friend better.

D. Why do I keep promises to my friend?

17. Because I believe it is an important personal attribute to live up to my promises to a friend.
18. Because I would feel bad about myself if I didn't.
19. Because I really enjoy following through on my promises.
20. Because it would threaten our friendship if I were not trustworthy.

\* \* \* \* \*

**Scoring the SRQ-F.** To score this questionnaire, first calculate the subscale scores for each of the four subscales: external regulation, introjected regulation, identified regulation, and intrinsic motivation. To do that, average the responses to each of the subscale's items. Listed below are the item numbers associated with each of the four subscales.

External Regulation: 3, 7, 9, 15, 20

Introjected Regulation: 1, 5, 11, 14, 18  
Identified Regulation: 4, 8, 12, 16, 17  
Intrinsic Motivation: 2, 6, 10, 13, 19

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). To form the RAI for this scale, use the following formula to combine the subscale scores:

$$2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$$