

## THE ROLE OF PERCEIVED SOCIAL SUPPORT IN SUICIDAL IDEATION AND SUBJECTIVE WELL-BEING AMONG INDIVIDUALS WITH SUBSTANCE USE DISORDERS

Sajid Iqbal Alyana,<sup>\*</sup> Amna Farooq<sup>\*</sup>, and Rabia Saeed<sup>\*\*</sup>  
sajidalyana@gmail.com

Department of Clinical Psychology, National University of Medical Sciences  
NUMS, Rawalpindi, Pakistan<sup>\*</sup>, Riphah International University, Faisalabad  
Campus, Pakistan<sup>\*\*</sup>

### ABSTRACT

**Objectives:** The study designed to determine the relationship between social support, suicidal ideation, and subjective well-being in individuals with substance use disorder. Specifically, it studied how perceptions of social support were linked with the levels of suicidal ideation and subjective well-being among people with substance use disorder.

**Design of the Study:** This research employed a cross-sectional design.

**Place and Duration of Study:** This study was carried out at Riphah International University, Faisalabad campus, Pakistan from March to October 2022.

**Sample and Method:** 200 adult males aged 18 to 45 years, diagnosed with substance use disorder, selected from various rehabilitation centers in Punjab, Pakistan. A demographic form, the Multidimensional Scale of Perceived Social Support, the Beck Scale for Suicidal Ideation, and the ICP Subjective Well-being Scale were used as research tools.

**Results and Conclusion:** The findings indicated that perceived social support significantly predicted both suicidal ideation and subjective well-being in individual with SUD. The findings suggest that social support plays a key role in decreasing the risk of suicidal ideation and enhancing subjective well-being in individuals with SUD.

---

**Keywords:** Social support; Suicidal ideation; substance use disorders; subjective well-being.

---

## INTRODUCTION

Perceived social support is a key factor in reducing suicidal ideation and improving subjective well-being in individuals with substance use disorders. It acts as a protective mechanism by fostering a sense of belonging, validation, and offering coping strategies that help individuals navigate the complex challenges associated with addiction and mental health issues. The emotional and practical support provided by family, friends, and peers creates an environment where individuals feel understood, valued, and less isolated. This sense of connectedness can significantly lower the likelihood of suicidal thoughts and play a role in maintaining the higher quality of life for those dealing with substance use challenges (Kawashima et al., 2019). Ultimately, strong social support networks help individuals cope more effectively with the emotional and psychological burdens of addiction, supporting their recovery and overall mental health (Kawashima et al., 2019).

According to World Health Organization (WHO, 2018), Suicide is a frequent phenomenon that claims the lives of over 800,000 individuals annually. Men are more likely than women to commit suicide, with peak times for both genders occurring between the ages of 25 and 45. According to studies conducted on the family members of the perpetrator, impulsivity, sadness, hopelessness, hallucinations, rationalizing suicide as a solution to issues, inflexible style of thinking, and a lack of social support are some potential causes of suicide (Rochmawati, 2009). History of drugs or alcohol abuse, self-harm, suicide attempts, and mental diseases are also key risk factors for suicidal behavior. Globally, significant contributing variables to suicide include alcoholism (13.3%), amphetamine dependence (2.4%), opioid dependence (1.9%), cocaine dependence (0.9%), and opioid dependence (1.9%) (Halladay et al., 2019). Suicidal ideation, which includes thoughts of self-harm, is a severe global public health concern. Suicidal thoughts, planning, and attempts are all components of the greater concept of suicide. Another study done by Center for Disease Control and Prevention (2012) indicated that among adults, those between the ages of 18 and 25 had the highest proportion of suicidal ideation (7.2%). One of the strongest indicators of a successful suicide is having attempted suicide before, and suicidal thoughts is linked to an elevated risk for suicide attempt (Bridge et al., 2006). The appearance of ideas of suicide is a critical marker of mental illness and behavioral difficulties. Therefore, it is vital to explore suicidal ideation and accompanying disorders. In 2012, suicide accounted for 1.4% of all fatalities globally, ranking as the second largest cause of death for those between the ages of 15 and 29 (Center for Disease Control and Prevention, 2012).

Subjective well-being (SWB) is, according to Diener et al. (2006), a vital term at any age. There are different opinions on what it means to be happy, including the hedonic viewpoint (which prioritizes joy and fulfillment) and the eudemonic perspective (which emphasizes development and importance). The word "subjective well-being" refers to an individual's opinion of how they are doing overall. Three components contribute to a high level of subjective well-being, as denoted by this construct: positive affective states like excitement, joy, and curiosity; negative affective states like anger, sorrow, depression, and lethargy, and an overall favorable judgment of one's life (Alyana et al., 2020). The third area, global self-judgment, comprises the cognitive part of SWB and combines life enjoyment. The 'homeostasis theory' of SWB suggests that everyone has a natural predisposition at the neurological level to maintain a stable level of SWB somewhere within a small range (Tomyn et al., 2015). Limited research has been done on how substance users' networks affect their emotional well-being but substance addiction and social support, as well as substance abuse and subjective well-being, are connected. There may be a connection between the three of them, and they do affect one another. Relationships can be classed into three sorts based on the kind of aid they provide: emotional support, material support, and intellectual stimulation. When compared to other sorts of support, emotional support may be the most essential in determining a person's degree of satisfaction when they have a substance use disorder (Park, 2004).

Evidence suggests that persons with poor SWB are more likely to struggle with mental health issues such as depression, antisocial conduct, suicidal ideation and attempt, low self-esteem, and interpersonal difficulties. Individuals with low SWB have also been connected to antisocial behaviors such as hostility toward others and sexual harassment, which can be both dangerous and illegal. Pay attention to people's ability to emotionally weather both good and terrible circumstances. Therefore, people who are more adaptable tend to find fulfillment in life regardless of their financial situation. The concept of subjective well-being was developed once it became clear that mental illness is more than just an intangible condition (Alfaro et al., 2016).

Multiple factors, such as mental illness, substance usage, unstable mental state, family history, peer pressure, and environmental pressures, have been connected to an increased chance of suicide. Substance abuse and prior suicide attempts are two major things to consider. More than 230 million people, or over 5% of the population worldwide (ages 15-64) have tried with illegal drugs at

least once. Several epidemiological studies have studied the relationship between substance usage and suicide; however, such examinations often provide equivocal results. The authors report the newest findings on the association between SUD, suicide ideation, attempts, and mortality (Carra et al., 2014).

There is a large array of responses that people might take when under stress. A person's cognitive capacity, social support system, and customized behavioral coping methods are all examples of mediators. Isolation and despair, as well as risky coping mechanisms like substance misuse or destructive behaviors like acting out or eating disorders, are more likely to arise in people who lack social support structures and adequate psychological resources (Kaplan et al., 1983). Suicide rates among both kids and adults have been observed to be greater in areas and clinics where depression, substance misuse, and violent behavior disorders are widespread (Rich et al., 1986). Studies suggests that substance consumption increases the risk of suicidal ideation, attempts, and fatalities.

Chudary et al. (2022) found that perceived social support had a negative association with suicidal thoughts and a positive correlation with quality of life in patients diagnosed with SUD. This implies that among people with SUD, greater social support may improve quality of life and lessen suicidal ideation.

Existing literature implies that suicidal thought is rooted in unresolved sentiments of worthlessness, hopelessness, and loneliness (Van et al., 2010) within the Interpersonal-Psychological Theory of Suicide (Van et al., 2010). Despite this, there have been inconsistent findings in the past linking social support and suicidal ideation. Lastly, it's likely that effects of substance use on suicidal ideation are illusory and are better explained by other causes. Both may be affected by a variety of the same causes, including impulse control. However, there is a dearth of knowledge about the directionality and processes between them in the existing corpus of literature. To address this gap in the research, the purpose of this study is to evaluate the function of social support in the development of suicidal thoughts among patients with substance use disorder.

Following are the Hypothesis:

- Perceived social support will significantly predict suicidal ideation among individuals with substance use disorder.
- Perceived social support will significantly predict subjective well-being among individuals with substance use disorder.

## **METHOD**

### *Participants*

The 200 volunteers who were diagnosed with substance use disorder by a psychologist or psychiatrist were chosen randomly from various rehabilitation centres in Faisalabad and Jhung cities. The following criterion was developed to choose the participants to control the extraneous variables' impact on the variables under inquiry.

### *Inclusion criteria*

Participants must be at least 18 years old and have a current diagnosis of Substance Use Disorder by DSM 5-TR (APA, 2022). Additionally, participants showed willingness to participate voluntarily in the research voluntarily.

### *Exclusion criteria*

Patients diagnosed previously to a mental disorder before acquiring a Substance Use Disorder diagnosis were excluded from the study. Additionally, persons with organic brain abnormalities or significant mental handicaps were not eligible to participate. The study also excluded participants with chronic medical issues or those who were unable to comprehend the instructions. Furthermore, people under the age of 18 or over the age of 45, as well as those who declined to participate, were not included in the research.

### *Measures*

#### Demographics Information Sheet:

The respondent's age, gender, the number of siblings, their birth order, marital status, and yearly and monthly household income were all questions on the demographic form. Details concerning drug use, type of drugs and the duration of use were taken through this form.

Iqbal, Farooq and Saeed

**Multidimensional Scale of Perceived Social Support (Zimet et al., 1988):**

Zimet et al. (1988) devised a 12-items multi-factor index of social support. 12 questions on this scale examine various components of an individual's social support system such as family, friends, and significant others. The possible range of results on this scale is 0-7 where high score indicates high perceived support. The internal consistency for full scale have been found as .85 whereas for significant others, family and friends, have been found as .91, .87 and .85 respectively.

**Beck Scale for Suicidal Ideation scale (Beck et al., 1979):**

The BSSI is a 19-item is a psychometrically sound tool to evaluate the presence and severity of suicide thoughts within the past seven days (Beck et al., 1979). The scale examines patient's thoughts, plans, and intentions related to suicide. Each item is scored on a three-point ordinal scale (0-2), yielding a total score of 0-38. No specific cut-off score is used for classification; instead, both the screening component (item 1 and 5) and the overall scale scores are utilized for data analysis. The BSSI has demonstrated high internal consistency, with reported Cronbach's alpha coefficient ranging from .89 to .97 across various studies.

**Subjective Well-Being Scale (Moghal & Khanam, 2015):**

The ICP Subjective Well-Being Scale (ICPSWS) is an indigenously developed tool to measure subjective well-being. It has three subscales named Positive Affect, Negative Affect and Life Satisfaction subscale. In which former subscales are consisted of 12 items while Life satisfaction subscale has 5 items rating on a Likert-type scale (ranging from 1= never to 5= always). The has good reliability scores have been found as i.e., .77, .73 and .82 while the Cronbach's alpha is is .84, .85 and .80 for positive affect, negative affect and life satisfaction scale respectively.

***Procedure***

The aims of the study were disclosed to all participants. Only those who volunteered to take part in the study and met the inclusion criteria were considered. The authorization was provided to each participant for their consent that highlighted the pros and disadvantages of participating, the safety

precautions that would be taken, and the flexibility to withdraw consent at any moment. After consenting, participants were given a quick survey to fill out about themselves after taking formal approval from the heads of various drugs treatment and rehabilitation institutions to carry out this study. There was no infringement of the participants' rights, privacy, or safety, and they were treated with respect and dignity at all times. Participants were instructed on the study's rationale and methods, and any potential benefits to their professional lives were underlined. They were informed that their identity and response were kept confidential.

**Table 1**

*Demographic Characteristics of the Substance Use Individuals*

Variables	<i>f</i>	%
Education		
Matriculation	156	78.0%
Inter	22	11.0%
Bachelors	15	7.5%
Masters	6	3.0%
No Formal Education	1	0.5%
Birth order		
First born	47	23.5%
Middle born	83	41.5%
Last-born	70	35%
Family System		
Nuclear	121	60.5%
Joint	79	39.5%
Profession		
Students	12	6.0%
Government-Job	8	4.0%
Private-Job	28	14.0%
Self-employed	70	35.0%
Labourer	65	32.5%
Unemployed	16	8.0%
Daily Wage Worker	1	0.5%
Duration of Drug Use		
1- 4 years	82	41%
3- 6 years	52	26%
6- 9 years	21	10%
10 years and above	45	23%
Drug of choice		
Marijuana	70	35%
Opioid	30	15%
Poly-drugs	40	20%
Injected drugs	60	30%

*N=200*



**Table 2***Descriptive Statistics of the study variables (N=200)*

Variables	N	a	Potential Range		Actual Range		M	SD	Skew	Kur
			Min	Max	Min	Max				
PSS	12	.89	0	84	20	70	45.6	10.8	-.45	.21
SI	10	.77	10	50	5	35	18.2	7.4	.89	.75
SWB	12	.80	12	60	25	75	52.1	9.6	-.32	.15

Note. M= Mean, SD= Standard Deviation, N= No. of items and  $\alpha$ = Alpha Reliability

Table 2 illustrates the descriptive statistics and the alpha coefficients of the scales. The results exhibited that alpha measures of all scales are satisfactory. In addition, mean and standard deviation values are computed to determine the general average scores of the respondents on a specific scale utilized in the current research study. The minimum and maximum values are also shown in the actual range, on the other hand. The value of skewness and kurtosis ranges from +2 to -2 which demonstrates the normal distribution of the data.

**Table 3***Linear Regression Analysis for Perceive Social Support as a predictor of Suicidal Ideation*

Variables	Standardized Coefficient		Unstandardized Coefficient	p	R <sup>2</sup>	F
	B	SE	$\beta$			
Constant	15.20	2.45		.000	.071	13.81***
Perceived Social Support	-.45	.07	-.37	.000		

Note. \* $p < .05$ . \*\*\* $p < .001$ .

Table 04 illustrates that perceived social support significantly negatively predicts the suicidal ideation ( $B = -0.45$ ,  $p < .001$ ). A one unit increase in social

support decreased suicidal ideation by 0.45 units. Accounts for 7.1% of the variance in suicidal ideation is explained by perceived social support.

**Table 4**

*Linear Regression Analysis for Perceive Social Support as a predictor of Subjective Well-Being*

Variables	Standardized Coefficient		Unstandardized Coefficient	<i>p</i>	<i>R</i> <sup>2</sup>	<i>F</i>
	<i>B</i>	<i>SE</i>	$\beta$			
Constant	48.10	3.50		.000	.066	14.04***
Perceived Social Support	0.52	.06	.37	.000		

Note. P = Significance

\**p* < .05. \*\*\**p* < .001.

Table 05 illustrates that perceived social support significantly positively predicts the subjective well-being (*B* = .52, *p* < .001). The higher the social support the better subjective well-being. Accounts for 6.6% of the variance in subjective well-being is explained by perceived social support and suicidal ideation.

## DISCUSSION

This study looked at how people with substance use disorders' subjective well-being, suicidal thoughts, and perceived social support relate to one another. The results highlight the important influence of social support on mental wellness outcomes, namely in lowering suicidal thoughts and improving subjective well-being.

Regression analysis exhibited that PSS was substantially linked to lower suicidal ideation (Table 3) indicating that people who feel supported by their social networks are less prone to commit suicide. This is consistent with earlier studies that emphasize the protective function of social ties in reducing suicide risk (Kawashima et al., 2019). Social support is a well-established protecting impact against upsetting feelings because it gives people with mental health issues coping mechanisms and emotional control (Yang et al., 2019).

The hypothesis that individuals with a drug use disorder experience lower levels of PSS and subjective well-being is also supported by the data (Table 4). The model explaining 6.6% of the variance in subjective well-being suggests that perceived social support is integral to the mental well-being of individuals with drug use disorders. Previous research supports this relationship, with studies indicating that individuals with substance use disorders often experience diminished well-being due to social isolation and lack of meaningful support networks (Kawashima et al., 2019).

Furthermore, the finding that social support is positively associated with subjective well-being is consistent with the results of a linear regression study by Yang et al. (2019), resilience acts as a mediator in the association between social support and life satisfaction in people with substance use disorders. While peer support among those with similar experiences may offer validation and mutual understanding, it is important to note that social support must extend beyond those with similar conditions in order to be fully effective.

Suicide is a global issue, and there exhibits a growing need to dig out into protective factors against suicide and social support have been found as one such potential factor. This research studies the role of social support as a protecting aspect against suicide among individuals with substance use disorder. Our findings indicate that, even after controlling for various factors, social support is linked to a lower probability of suicidal ideation and attempts. The primary results suggest that PSS is a key predictor of suicidal thoughts. The study also highlights the association between PSS and subjective well-being in individuals with substance use disorder. These findings align with a large body of research that establishes a connection between substance use and suicidal behavior in the general population. Additionally, the results are consistent with previous studies, though limited, that show links between substance use and poor health and social outcomes among patients. Factors like an individual's level of satisfaction, social support, and self-esteem have all been linked to their risk-taking behavior. The perceived encouragement from friends, however, shows only a small influence among patients. Research has shown that social isolation and a lack of significant support systems frequently result in decreased well-being for people with substance use disorders (Kawashima et al., 2019).

Perceived social support is a significant predictor of suicidal thoughts among individuals with SUD, as demonstrated by the findings of the first hypothesis. In a study involving 220 teenagers including 152 females with suicidal risk during a mental hospitalization, their perceptions of social support

from family, peers and significant others were compared to their psychopathology (King et al., 1993). Relapse studies revealed that females with less family support were more likely to experience unhappiness, problematic side effects, and suicidal ideation. Additionally, a strong link was found between peer support and distressing side effects and suicidal thoughts among males (Kerr et al., 2006).

One important issue raised by the findings of current study, though outside the scope of this research, is the exact way in which social support play role to reduces the risk of suicide. Potential mechanisms may encompass psychological factors (e.g., increased social support leading to better self-esteem), social factors (e.g., social support providing friends for distraction during stressful times), or physical factors (e.g., friends helping eradicate dangerous items from a suicidal individual's home). It is expected, however, that social support as a multidimensional concept that contributes to suicide resilience in various ways.

### *Conclusion*

This study underscores the critical role of PSS in predicting suicidal ideation and subjective well-being among individuals with SUD. Our findings indicate that individuals with lower levels of social support are at a heightened risk for suicidal thoughts and behaviors, reinforcing the importance of fostering strong, supportive relationships in this vulnerable population. Additionally, perceived stress was identified as a significant predictor of negative outcomes, highlighting the need for interventions that address both stress and the quality of social support in individuals with substance use disorders. The results also suggest that enhancing social support networks, particularly through peer support and familial involvement, may improve mental health outcomes and reduce the risk of suicide in this group.

### *Limitations and Recommendations*

Future research is necessary to explore the specific mechanisms through which social support exerts its influence on mental health, as well as to identify which aspects of social support emotional, instrumental, or otherwise are most effective in mitigating the adverse effects of substance use and preventing suicide. This research could contribute to the development of more targeted interventions aimed at improving the well-being of individuals with substance use disorder and ultimately reducing their risk of suicide.

In summary, current study highlights the significance of perceived social support and stress management in supporting the mental health of individuals with SUD and calls for continued exploration of these factors to inform more effective prevention and intervention strategies.

## REFERENCES

- Alfaro, C., Teijeira, A., Oñate, C., Pérez, G., Sanmamed, M. F., Andueza, M. P., & Melero, I. (2016). Tumor-produced interleukin-8 attracts human myeloid-derived suppressor cells and elicits extrusion of neutrophil extracellular traps (NETs): Effects of IL8 on MDSC. *Clinical Cancer Research*, 22(15), 3924-3936. <https://doi.org/10.1158/1078-0432.CCR-16-0334>
- Alyana, S. I., Ahmad, R., & Aftab, S. (2020). Perception of maternal parenting practices and adolescent's subjective well-being: A predictive study. *Russian Law Journal*, 8(4), 181–193. <https://doi.org/10.24149/russianlawjournal.8.4.181-193>
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176/appi.books.9780890425787>
- Beck, A. T., Kovacs, M. & Weissman, A. (1979). Assessment of suicidal intention: The scale for Suicide Ideation. *Journal of Consulting and Clinical Psychology*, 47(2), 343-352.
- Bridge, J. A., Goldstein, T. R., & Brent, D. A. (2006). Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry*, 47, 372-394. <https://doi.org/10.1111/j.1469-7610.2006.01615.x>
- Carrà, G., Bartoli, F., Crocamo, C., Brady, K. T., & Clerici, M. (2014). Attempted suicide in people with co-occurring bipolar and substance use disorders: Systematic review and meta-analysis. *Journal of Affective Disorders*, 167, 125-135. <https://doi.org/10.1016/j.jad.2014.05.042>
- Center for Disease Control and Prevention (2012). Youth risk behavior surveillance-United States, 2011. *MMWR*, 61, 1-45. [PubMed] [Google Scholar][Ref list]

- Chudary, G., Ali, S., Dar, S., Qasim, A., & Zakaria, M. (2022). The Moderating Role of Perceived Social Support Between Quality of Life and Suicidal Ideation Among Patients of Substance Use Disorders. *NVEO - NATURAL VOLATILES & ESSENTIAL OILS Journal*, 9(1), 1914-1920.
- Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, 61(4), 305–314. <https://doi.org/10.1037/0003-066X.61.4.305>
- Moghal, F., & Khanam, S. J. (2015). DEVELOPMENT OF ICP SUBJECTIVE WELL-BEING SCALE (SWBS). *Pakistan Journal of Clinical Psychology*, 14(2). Retrieved from <https://pjcpku.com/index.php/pjcp/article/view/68>
- Halladay, J. E., Munn, C., Boyle, M., Jack, S. M., & Georgiades, K. (2019). Temporal changes in the cross-sectional associations between cannabis use, suicidal ideation, and depression in a nationally representative sample of Canadian adults in 2012 compared to 2002. *The Canadian Journal of Psychiatry*, 65(2), 115-123. <https://doi.org/10.1177/0706743719854071>
- Kaplan, B. H., Cassell, J. C., & Gore, S. S. (1983). Social support and health. *Medical Care*, 15, 47-58. <https://doi.org/10.1097/00005650-198301000-00006>
- Kawashima, D., Tanaka, M., Shimoda, H., Nakagami, E., & Nemoto, T. (2019). Social support and its impact on mental health and suicidal ideation among individuals with substance use disorders. *Journal of Substance Abuse Treatment*, 106, 23–31.
- Kerr, D. C. R., Preuss, L. J., & King, C. A. (2006). Suicidal adolescents' social support from family and peers: Gender-specific associations with psychopathology. *Journal of Abnormal Child Psychology*, 34, 99-110. <https://doi.org/10.1007/s10802-005-9014-7>
- King, C. A., Segal, H. G., Naylor, M., & Evans, T. (1993). Family connections and suicidal thoughts and behaviors among adolescents hospitalized for depression. *Journal of the American Academy of Child & Adolescent Psychiatry*, 32(3), 511–518.

- Park, N. (2004). The role of subjective well-being in positive youth development. *The Annals of the American Academy of Political and Social Science*, 591, 25-39. <https://doi.org/10.1177/0002716203260024>
- Rochmawati, I. (2009). *Nglalu: Seeing Suicide Phenomenon with Conscience* (1st ed.). Yogyakarta: Jejak Kata Kita.
- Rich, C. L., Young, D., & Fowler, R. C. (1986). San Diego suicide study: I. Young vs old subjects. *Archives of General Psychiatry*, 43(6), 577-582. <https://doi.org/10.1001/archpsyc.1986.01800060071007>
- Tomyn, A. J., Weinberg, M. K., & Cummins, R. A. (2015). Intervention efficacy among 'at risk' adolescents: A test of Subjective Wellbeing Homeostasis Theory. *Social Indicators Research*, 120(3), 883–895. <https://doi.org/10.1007/s11205-014-0619-5>
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr (2010). The interpersonal theory of suicide. *Psychological Review*, 117(2), 575–600. <https://doi.org/10.1037/a0018697>
- World Health Organization. (2018). *Suicide prevention: Key facts*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/suicide>
- Yang, Y., Tian, Y., Fan, Y., & Liu, X. (2019). Association between social support and life satisfaction among people with substance use disorder: The mediating role of resilience. *Addictive Behaviors*, 98, 106757.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. [https://doi.org/10.1207/s15327752jpa5201\\_2](https://doi.org/10.1207/s15327752jpa5201_2)