

# Relationship between Posttraumatic Growth and Resignation Orientation After Heartbreak in College Students: Considering Gender Differences

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This study examined posttraumatic growth (PTG) as a long-term adjustment state after a heartbreak among college students, and its relationship with resignation orientation by gender. This study aimed to deepen the understanding of the psychological factors that enhance adaptation to heartbreak among men and women, a significant issue during adolescence. In July 2022, a questionnaire survey was administered to 250 undergraduate students at University A, of whom 131 who had experienced heartbreak were included in the analysis. The participants were asked whether they had lost love, the duration for which they had been in love with their lost love, the length of their relationship with them, and the form of their lost love. They were also asked to respond to the Posttraumatic Growth Inventory (PTGI) and the Resignation Orientation Scale (ROS). Pearson's correlation analysis was conducted between the PTGI and ROS for each gender. The results showed that proactive resignation was positively correlated with each factor of PTGI among women, whereas avoidant resignation was negatively correlated with each factor of PTGI among men. Therefore, having a positive orientation that moving on to other problems or issues would be beneficial to them, may be effective in reconstructing the negative repercussions of heartbreaks into constructive outcomes among women. In contrast, the cognitive strategy of resignation among men was associated with negative repercussions of the traumatic event, which may have inhibited their subsequent growth.

**Key words:** college students, heartbreak, posttraumatic growth, resignation orientation, gender differences

## Introduction

A heartbreak is an event that many people experience during adolescence and is often a traumatic experience that has a strong impact on those involved. Miyashita et al. (1991) in their study of university students regarding psychological changes after heartbreak found not only negative changes such as not being able to love someone but also positive changes such as considering the feelings of the other person and their situation. They also state that “to have a deep love affair in one’s youth that touches on each other’s values and way of life, and even if this experience ends in failure, it will certainly be a positive one for the person and must have a positive effect on his or her future life.”

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Positive psychological transformation triggered by a stressful event is considered posttraumatic growth (PTG) (Imura, 2016; Park et al., 1996; Tedeschi & Calhoun, 1996). PTG, proposed by Tedeschi & Calhoun (1996), refers to the positive transformations that can result from negative experiences. PTG is also defined as “the experience of positive psychological transformation resulting from mental struggle or struggle in a crisis event or difficult experience.” (Davis et al., 2003). Although the term “PTG” includes the word “trauma,” it may be triggered not only by life-threatening events such as psychiatrically defined traumas that cause posttraumatic stress disorder (PTSD), but also by a wide range of experiences, including bereavement (Michael & Cooper, 2013) and distress experiences (Nishino & Sawasaki, 2014). In addition, Tedeschi & Calhoun (2004) pointed out that PTG can occur regardless of experience as long as the individual experiencing it has had their values threatened, challenged, and struggled as a result (Taku, 2016).

Some studies (Davis et al., 2003; Mearns, 1991; Monroe et al., 1999; Simpson, 1987) have dealt with psychological reactions such as depression and stress reactions to measure psychological transformation after heartbreak. These are easily influenced by factors other than relationship breakdown such as worries about relationships other than romantic ones, health problems, and environmental changes (Yamashita & Sakata, 2008). Yamashita & Sakata (2008) also examined the long-term adjustment state after a relationship breakdown, considering the possibility that even if the adjustment state deteriorates temporarily immediately after a relationship breakdown, it can change positively after a certain period. In light of the above, this study focuses on PTG as a long-term adjustment state after college students' heartbreaks and examines its psychological factors.

Since a heartbreak is usually an irreversible separation from a lover, recovering from it requires abandoning the continuation of the relationship with the lost love and psychologically terminating the relationship (Asano, 2010). Previous studies have discussed abandonment as a type of coping in stress research, and its negative aspects have been emphasized as a strategy to avoid or leave problems behind (Takaba & Fukumori, 2017). For example, Suzuki (2004) investigated the relationship with mental health using the Tri-axial Coping Scale and reported a significant positive correlation between “abandonment” coping strategies and depression, anxiety, and apathy. Contrarily, the positive impact of resignation is also suggested. Wrosch et al. (2003) defined abandoning goal as “goal disengagement,” and setting and committing to a new goal as “goal reengagement” and examined its relationship to mental health. The results indicated that those with high levels of both “goal disengagement” and “goal reengagement” have high levels of mental health. Regarding these differences among previous studies, Murayama & Oikawa (2005) stated that “even if a person is aversive at the behavioral level, they will not become nonadaptive unless they are aversive at the goal level.” In other words, even in the coping of abandoning, if one has a goal and then abandons it, as in “abandon an unattainable goal in order to achieve another goal,” the behavior is not considered avoidance at the goal level, and psychological distress is low.

Asano (2010) conceptualizes such abandon at the goal level as a “resignation orientation,”

which is defined as “an individual’s tendency to give up at the goal level when the individual is in a state of conflict,” and has a two-factor structure: proactive resignation and avoidant resignation. Proactive resignation is the orientation of thinking positively that it is beneficial for one to move on to other problems. Contrarily, avoidant resignation is the orientation to stop coping with a problem motivated by the limitations of coping with it. In contrast to the proactive resignation, individuals tend to avoid problems because they do not have a sense of efficacy in coping, which is similar to the conventional “abandoning.” Even if the person terminates the relationship with lost love, the long-term adjustment state is expected to change between future-oriented coping, such as moving on to other goals or changing one’s mood, which proactive resignation encompasses, and helpless and avoidant coping, such as the impossibility of coping and avoidant resignation. Proactive resignation is associated with emotion regulation and self-care, which may inhibit depression and increase satisfaction in life. Conversely, avoidant resignation is associated with avoidant thoughts and behaviors and may lead to antagonism. Avoidant resignation may have negative psychological effects, such as prolonged depressive symptoms, due to maintenance of internal conflict states and decreased satisfaction in life. Therefore, long-term adjustment likely differs between individuals with proactive and avoidant resignation. The former may focus on other goals or self-care, whereas the latter may be unable to cope.

In this study, we focused on posttraumatic growth (PTG) as a long-term adjustment state after heartbreak in college students, and examined its relationship with resignation orientation. For adolescent college students, romantic love is one of the most important concerns (Aiba, 2011), and success or failure is presumed to affect their mental health (Inosaki & Kasai, 2020). Therefore, we believe that it is important to examine college students’ long-term adjustments to the crisis of lost love. The relationship between PTG and coping behavior has been examined for psychological change after heartbreak (Davis et al., 2003; Sprecher et al., 1998). We expect to obtain more detailed findings on the factors related to the adjustment state after heartbreak by examining the relationship with resignation orientation in the present study.

In addition, gender differences in commitment and attitudes toward romantic relationships are often observed (Inosaki & Kasai, 2020; Matsui, 1990; Matsui et al., 1990; Wada, 1994), and it is necessary to consider gender differences as a factor in research on relationship breakdown (Yamashita & Sakata, 2008). Asano et al. (2010) examined coping after heartbreak, and reported that women understand the difficulty of repairing the relationship and moving away from the lost partner, whereas men tend to remain attached to the lost partner even after the breakup. These differences, such as the presence or absence of remaining attachment, may affect the association between resignation orientation and PTG after heartbreak. Therefore, we attempted to examine the relationship between PTG and resignation orientation after heartbreak separately for men and women, and aimed to deepen our understanding of the psychological factors for adaptation from the event of heartbreak, considering gender differences.

## Methods

### Procedure

In July 2022, a questionnaire survey was conducted with undergraduate students at University A, after a university lecture, we informed participants in writing of the purpose of the study, the confidentiality of the data, and the voluntary nature of the survey. Responses were obtained from 250 students who agreed to participate. Of these, 129 (57 men, 72 women) who had experienced heartbreak were included in the analysis. Respondents who did not report their gender were excluded from the analysis. The average age of the participants was 19.6 years ( $SD = 1.11$ ).

This study was approved by the Ethics Committee of the authors' university. The study approval number is 2022-4.

### Measures

In the questionnaire, respondents were first asked about their age and gender. They were then asked whether they had experienced a heartbreak. The following definitions of heartbreak were presented to the respondents: "A broken heart includes the experience of a breakup when either of the persons initiate the breakup, or when the breakup occurs without either party's consent. Unrequited love, in which the person gives up on his/her own or confesses love to someone and is rejected, is also included in the definition of a heartbreak." Respondents who had experienced a heartbreak were further asked, "Please recall your most painful experience of a heartbreak since junior high school. Let the person you recall at that time be Mr. /Ms. A." The respondents were asked to respond to the following questions: the length of time (in months) since their heartbreak, the duration of their relationship with Mr. /Ms. A (not in a relationship, less than one month, one month to less than three months, three months to less than six months, six months to less than one year, one year to less than two years, and two years or more), the type of heartbreak (by myself, by the partner, and other). Respondents were asked to complete the Resignation Orientation Scale (ROS) and the Posttraumatic Growth Inventory (PTGI).

The ROS is a self-administered scale comprising nine items (Asano, 2010) using the following question: "When you think about something you are frustrated, dissatisfied with, or troubled by, to what extent do you think about the following?" The ROS consists of two independent domains: proactive and avoidant resignation. Proactive resignation indicates a positive orientation, in which focusing on other issues and a challenge is beneficial. Proactive resignation is assessed using 5 items, such as "I think I have better things to do than regretting it." Avoidant resignation indicates an individual's negative orientation towards the belief that they cannot cope with the problem. Avoidant resignation is measured using 4 items, such as "I think there's not much I can do about it." Responses are rated on a seven-point Likert scale (1 = not at all; 7 = always). Asano (2010) reported that Cronbach's alpha for proactive resignation was .76, indicating good internal consistency, whereas that for avoidant resignation

was .64. Score ranges for proactive resignation and avoidant resignation are 7–35 and 4–28, respectively.

The PTGI (Tedeschi & Calhoun, 1996) is a self-administered scale containing 21 items, using the following question: “Indicate for each of the statements below the degree to which this change occurred in your life as a result of the crisis/disaster, using the following scale.” Responses are rated on a six-point Likert scale (0 = not at all; 5 = very much). Taku et al. (2007) conducted a factor analysis of the Japanese version of the PTGI and divided it into four factors: relating to others, new possibilities, personal strength, and spiritual change and appreciation of life. Relating to others contains 6 items such as “I clearly see that I can count on people in times of trouble.” New possibilities contains 4 items such as “I established a new path for my life.” Personal strength contains 4 items such as “I know that I can handle difficulties.” Spiritual change and appreciation of life contains 4 items such as “I have a stronger religious faith.” Cronbach’s alpha coefficients for the four factors reported by Taku et al. (2007) were .86, .82, .79, and .66, respectively. In this study, “crisis/disaster” was changed to “heartbreak.” Four items included in the spiritual change and appreciation of life factor were not used because they did not fit the purpose of this study. Score ranges for relating to others, new possibilities, and personal strength are 0–30, 0–20, and 0–20, respectively.

## **Analysis**

All statistical analyses were performed using SPSS version 20.0 (IBM Corp., Armonk, NY, USA). All tests were two-tailed, and a significance level of 5% was used.

## **Results**

### **Characteristics of participants**

The mean time since the heartbreak was 33.85 months ( $SD = 24.91$ ). The most frequent response was “not in a relationship” with their lost loves (29.5%). Among those who had been in a relationship, “less than 1 month” was selected by a small percentage (4.7%), while the rest of the respondents were equally divided among all sub-categories of time period. The proportion of respondents who had lost their love was slightly higher for “by the partner” than for “by myself” (Table 1). There were no gender differences in their distribution.

**Table 1**  
*Participant Characteristics*

	Total ( <i>n</i> = 129)		Men ( <i>n</i> = 56)		Women ( <i>n</i> = 70)		$\chi^2$	<i>p</i>
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
<b>Duration of a relationship</b>								
Not in a relationship	38	29.5	11	19.3	27	37.5		
Less than 1 month	6	4.7	3	5.3	3	4.2		
1 month to less than 3 months	18	14.0	9	15.8	9	12.5		
3 months to less than 6 months	15	11.6	11	19.3	4	5.6	9.17	.16
6 months to less than 1 year	19	14.7	8	14.0	11	15.3		
1 year to less than 2 years	17	13.2	8	14.0	9	12.5		
More than 2 years	16	12.4	7	12.3	9	12.5		
<b>Type of heartbreak</b>								
From oneself	32	24.8	15	26.3	17	23.6		
From the other party	40	31.0	22	38.6	18	25.0	3.90	.14
Other	57	44.2	20	35.1	37	51.4		

*Note.* Other includes “the breakup came from either side,” “I backed out,” and “I confessed and was rejected.”

**Profile of ROS and PTGI**

Table 2 presents the mean scores and alpha coefficients for each scale used in this study. Regarding the alpha coefficients, slightly lower values were observed for the Avoidant Resignation score in ROS. The differences in the scores on each scale between men and women were not significant.

**Correlations between resignation orientation and PTG by gender**

As shown in Table 3, among women, PTG was moderately and positively correlated with proactive resignation, relating to others, and personal strength of the PTGI ( $r = .41, p < .01$ ;  $r = .44, p < .01$ ) and strongly and positively correlated with new possibilities ( $r = .52, p < .01$ ). Among men, PTG was moderately and negatively correlations with avoidant resignation, relating to others, and personal strength ( $r = -.40, p < .01$ ;  $r = -.28, p < .05$ ) and strongly and negatively correlated with new possibilities ( $r = -.53, p < .01$ ). In addition, significant differences were observed between men and women in the association between proactive resignation and relating to others ( $z = 2.15, p < .05$ ) and between avoidant resignation and relating to others, new possibilities, and personal strength ( $z = 3.69, p < .01$ ;  $z = 4.48, p < .01$ ;  $z = 2.55, p < .01$ ).

Pearson’s correlation analysis was conducted to examine the relationship between the three factors of the PTGI and the duration of heartbreak; no significant correlation was

Table 2  
*Profile of ROS and PTGI (N = 129)*

		Total (N = 129)			Men (n = 56)		Women (n = 70)		<i>t</i>	<i>p</i>
		<i>M</i>	<i>SD</i>	<i>α</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
ROS	Proactive Resignation	24.74	5.64	.84	24.77	5.39	24.71	5.87	0.53	.95
	Avoidant Resignation	18.81	4.60	.68	18.39	5.08	19.14	4.18	0.90	.37
PTGI	Relating to Others	15.67	7.86	.89	15.48	7.73	15.83	8.01	0.24	.81
	New Possibilities	9.64	5.32	.84	10.14	5.49	9.24	5.18	0.94	.35
	Personal Strength	9.02	4.97	.82	9.48	5.28	8.64	4.70	0.94	.35

*Note.* ROS = Resignation Orientation Scale; PTGI = Posttraumatic Growth Inventory.

found. In addition, when we conducted a Spearman's correlation analysis to examine the relationship between the three PTGI factors and the duration of romantic love, no significant correlation was found. Furthermore, no significant differences were found in the results of the analysis of variance with the three types of lost love as independent variables and the three PTGI factors as dependent variables.

## Discussion

In this study, responses were obtained from 250 university students, 129 (51.6 %) of whom had experienced heartbreak. The prevalence is similar to that in the study by Asano et al. (2010) (50.8%) and in the study by Uenoyama & Okamoto (2017) (49.0%). Note that, in this study, both experiences, unrequited love or relationship breakdown, were treated as heartbreaks, as a negative event in which psychological health is temporarily impaired, and the need for recovery is high. Another feature of the data obtained in this study was that although there were individual differences in the length of time that had elapsed since the heartbreak,

Table 3  
*Correlations of the ROS and the PTGI by gender (Pearson)*

		PTGI		
		Relating to Others	New Possibility	Personal Strength
ROS	Proactive Resignation	.04 <b>.41**</b>	.23 <b>.52**</b>	.16 <b>.44**</b>
	Avoidant Resignation	<b>-.40**</b> <b>.25*</b>	<b>-.53**</b> .23	<b>-.28*</b> .18

*Note.* ROS = Resignation Orientation Scale; PTGI = Posttraumatic Growth Inventory. Upper row: men ( $n = 56$ ); lower row: women ( $n = 70$ ). Bolded type is significant.

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

generally 2-3 years had elapsed since the heartbreak was recalled. Considering the participants' age, majority regarded their high school heartbreak as the "most painful experience of heartbreak."

The present study attempted to address PTG as a long-term adjustment state after heartbreak and examine its relationship with resignation orientation separately for men and women. With regard to the alpha coefficients of resignation orientation, sufficient values were obtained for proactive resignation; however, for avoidant resignation, the values were only in the .60 range, similar to that of Asano's study (2010). Although we were unable to obtain a value of .70 or higher, which is the criterion provided by Nunnally (1978), we considered the small number of items (Cortina, 1993; Holden et al., 1991) and the fact that the factor structure was fully examined in Asano's study (2010), to be sufficient for the analysis for the purposes of this study.

The results of the correlation analysis showed that, for women, proactive resignation was moderately to strongly positively correlated with all factors of the PTGI. This supports the finding (Sprecher et al., 1998) that avoiding the object of a heartbreak allows a person to start a new life that is independent of it and promotes psychological detachment. Moreover, women understand the difficulty in repairing a relationship and maintain distance from previous romantic partners (Asano et al., 2010). We believe that this characteristic influenced these associations. PTG is "an experience of positive psychological transformation resulting from mental struggle in a crisis event or difficult experience" (Tedeschi & Calhoun, 2004). Traumatic events shake an individual's basic assumptions about the self and the inner world (Janoff-Bulman, 2004). Consequently, intrusive rumination implies that negative and unwanted thoughts recur, reducing the functioning of the person involved. However, in the PTG process, these intrusive ruminations are followed by deliberate rumination (Taku et al., 2009), meaning-making (Kamijo & Yukawa, 2016) and positive reinterpretations (Dolbier et al., 2010) that constructively determine the meaning of the events as they occur. As a result, shaky basic assumptions can be reconstructed and PTG can arise (Ueno et al., 2016). For women, emotion regulation and self-care in proactive resignation may be effective in restructuring the negative rumination of a heartbreak into constructive rumination, thus promoting PTG.

In contrast, in men, these associations were not found; rather, the perceived avoidant resignation was moderately and negatively correlated with relating to others and personal strength, and strongly and negatively correlated with the new possibilities. Asano (2010) considers the avoidant resignation to be similar to traditional "giving up," which is associated with evasive thoughts and behaviors, and is also a cognitive strategy of failing to take effective steps to regulate emotions, leading to a rumination state. In men, this cognitive strategy of resignation is associated with a negative reaction to a traumatic event that may inhibit subsequent growth. As men depend on their partners for a source of social support more than women (Yamashita & Sakata, 2008), they tend to remain attached (Asano et al., 2010). This tendency could influence these associations. Considering that there were no significant gender differences in the scores of the PTGI and the resignation orientation scale, it can be considered



that the strategy of resignation orientation has a functional meaning for women in relation to PTG after a heartbreak, even if there are no differences in the foundations of the strategy.

One limitation of this study is that the sample size was small because the analysis was restricted to those who had experienced heartbreak. Hence, the data must be read in light of the fact that they were from a single university. Furthermore, since it was a correlational study based on cross-sectional data, causal relationship of how resignation orientation affects PTGI in the process of adaptation from a heartbreak cannot be assumed. Hence, retrospective data at a point in time when memories of the heartbreak are more vivid must be considered. It should also be noted that memory and cognitive biases are likely to intervene when dealing with retrospective data of heartbreak. To ensure inclusion, this study did not exclude participants by time since heartbreak, unlike some studies that limited the analysis to those who had experienced heartbreak within the past 12 months (Asano et al., 2010; Mearns, 1991).

Despite these limitations, the present study allowed us to empirically examine the relationship between PTG after heartbreak and resignation orientation, which refers to giving up at the goal level. Previous studies have reported that avoidance coping at the behavioral level shortens the recovery period from heartbreak (Kato, 2005) and promotes psychological detachment from the object of heartbreak (Asano et al., 2010), but when examined from the perspective of resignation orientation, we found that resignation orientation functions more effectively in the long-term adjustment state from heartbreak in women than in men. We hope that these findings will deepen our understanding of the process of adjustment after heartbreak in adolescence and will be useful in supporting adjustment in student counseling and other settings.

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(Received September 29, 2023)

(Accepted January 19, 2024)