

Which One is More Detrimental for Humankind? Ostracism or Social Exclusion? Their Effects on Depression, Anxiety, Stress

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Abstract

The aim of the present study was to investigate effects of ostracism, and social exclusion on depression, anxiety, stress, and this study was conducted with the view that ostracism and social exclusion are different types of exclusion from each other. The sample was composed of 191 university students studying at a state university in Turkey. Data was gathered by using personal information form, Ostracism Experience Scale for Adolescents, and Depression, Anxiety, Stress Scale-21. In order to examine the effects of ostracism and social exclusion on depression, anxiety and stress, hierarchical regression analysis was carried out. Correlation analysis was also carried out to determine the relationships among variables. The results showed that both ostracism and social exclusion were associated with depression and stress. However, only ostracism was related to anxiety. Results of hierarchical regression analysis showed that ostracism and social exclusion predicted depression and stress, but social exclusion's contributions to these models were found to be limited. Moreover, ostracism predicts anxiety, and age and gender were not found to be significant. According to these results, it can be concluded that ostracism and social exclusion could be a different type of exclusion. As a result, their effects on depression, anxiety and stress might differ from each other.

Keywords: ostracism, social exclusion, depression, anxiety, stress, exclusion types

Öz

Hangisi İnsanlık İçin Daha Tehlikeli? Psikolojik Dışlanma mı Sosyal Dışlanma mı? Depresyon, Anksiyete, Stres Üzerindeki Etkileri

Bu çalışmanın amacı psikolojik dışlanma ve sosyal dışlanmanın depresyon, anksiyete, stres üzerindeki etkilerini incelemektir. Çalışma, psikolojik dışlanma ve sosyal dışlanmanın farklı dışlama türleri olduğu düşüncesinden hareketle yürütülmüştür. Araştırmanın örneklemini Türkiye'de bir devlet üniversitesinde öğrenim görmekte olan 191 üniversite öğrencisi oluşturmaktadır. Veriler kişisel bilgi formu, Ergenler için Dışlanma Ölçeği ve Depresyon, Anksiyete, Stres Ölçeği ile toplanmıştır. Psikolojik dışlanma ve sosyal dışlanmanın depresyon, anksiyete ve stres üzerindeki etkilerinin tespit edilmesi amacıyla korelasyon analizleri ve hiyerarşik regresyon analizleri yürütülmüştür. Sonuçlar hem psikolojik dışlanmanın hem de sosyal dışlanmanın depresyon ve stresle ilişkili olduğunu göstermektedir. Ancak yalnızca psikolojik dışlanma anksiyete ile ilişkili bulunmuştur. Hiyerarşik regresyon analizi sonuçları psikolojik dışlanma ve sosyal dışlanmanın depresyon ve stresi yordadığını göstermektedir ancak sosyal dışlanmanın bu regresyon modellerine katkısı sınırlı olduğu tespit edilmiştir. Ayrıca psikolojik dışlanma anksiyeteyi yordamaktadır ve yaş ve cinsiyetin ise anlamlı bir katkısı bulunamamıştır. Elde edilen sonuçlara göre psikolojik dışlanma ve sosyal dışlanmanın farklı dışlanma türleri olduğu ve depresyon, anksiyete ve stres etkilene düzeylerinin de farklılaştığı söylenebilir.

Anahtar Kelimeler: psikolojik dışlanma, sosyal dışlanma, depresyon, anksiyete, stres, dışlanma türleri

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INTRODUCTION

The phenomenon of exclusion has long attracted the attention of the social psychologist. Many different words like ostracism, social exclusion, social outcast and rejection are used to indicate the concept of exclusion in the literature (Leary, 2005). According to some views, there are no empirical results that these concepts are the same or different from each other (Aydin et al., 2013; Williams, 2007). Nonetheless, these exclusion concepts (ostracism, social exclusion, rejection) are used by some researchers interchangeably (Üskül & Over, 2014) while others are used in different meanings (Leary, 2005). In addition, there are limited sources about differences or similarities of these exclusion types in literature. According to literature, in rejection, people are saliently rejected by their groups, and they are excluded from the groups' activities. In social exclusion condition, people sometimes are explicitly or implicitly excluded by their groups, and they are excluded from some or all activities of the group. Ostracism has also differed from social exclusion and rejection because ostracism consists of ignored (Kavaklı, 2018; Leary, 2005; Williams & Zadro, 2001). Most of the time, there are no specific and apparent reasons for ostracism to occur. The differences between these concepts have been taken into consideration in recent years (Aydin et al., 2013). Moreover, Wesselmann, Michels and Slaughter (2019) have stated that studies on the types of exclusion were limited, and it would be useful for researchers to compare the differences of exclusion types, and also cognitive, affective, behavioural influences of these concepts. For these reasons, this study was conducted with the view that ostracism and social exclusion were different from each other. It was expected that ostracism influences depression, anxiety and stress more negatively than social exclusion does, and this expectation was investigated in this research.

There are some studies which are related to ostracism, social exclusion, depression, stress, and these studies suggest that ostracism (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997; Niu, Sun, Tian, Fan, & Zhou, 2016; Williams & Nida, 2011) and social exclusion (Leary, 1990; Targosz et al., 2003) are associated with notably depression and stress. Almost all types of exclusion could be related to depression, anxiety and stress, but the substantial question is that does these effects vary according to the type of exclusion (ostracism and social exclusion)?

Most of the time, people who are exposed to ostracism and people who apply ostracism are not aware of this

process. In this way, ostracism could affect basic human needs much more negatively, and Williams' (2007), a need-threat model serve a better explanation for this process. There are different theories and models proposed by different researchers to explain the mechanisms underlying the reactions and behaviours caused by exclusion. The social monitoring system (Pickett & Gardner, 2005), social pain theory (MacDonald & Leary, 2005), sociometer theory (Leary, 1999) can be given as an example. Nevertheless, Williams' (2001, 2007) need-threat model differs from other exclusion models because Williams' model entirely focuses on ostracism, and try to explain this phenomenon.

According to Williams' model, individuals have some basic human needs such as self-esteem, need to belong, control and meaningful existence. Experiences of ostracism affect these needs negatively. In the centre of this model, there is the need threat concept that is mentioned above. An ostracism experience may influence these needs, and individuals' reactions change according to the type of threatened need. Whether it is ostracism or social exclusion, it is evident that both of them affect people negatively. However, as mentioned above, ostracism may affect individuals more than social exclusion does. Especially, considering the nature of ostracism, the concept can be expected to pose more threats to the need for control. Because ostracism consists of ignored, and a person experiencing ostracism does not give any information about the reason for exclusion. Because of the lack of information about the cause of exclusion, in other words, uncertainty, ostracism may affect the individual more, and this research focused on the idea that ostracism and social exclusion might be different types of exclusion than it was thought previously. From this point of view, ostracism and social exclusion are thought to influence depression, anxiety and stress at different levels. In this research, it was thought that the effects of ostracism on depression, anxiety and stress were more severe than those of social exclusion.

METHOD

Participants

Data was collected from the university students studying at a state university in Turkey in September in 2018. One hundred ninety-one participants participated in this study. The age range varies from 18 to 24 (10 participants

did not specify their ages). Thirty-seven male (19.4%) and 154 female (80.6%) were included in the study ($M=20.70$, $SD=1.35$). The criteria for recruitment to this study were that the participant was older than 18 years, volunteered to participate in the research, and answered all the questions in the questionnaire. Before the data collection part, informed consent form stating the details of the study was distributed to all participants, and participants who were volunteer signed this form.

Measures

In order to gather data about participants' gender and age, a personal information form was created. In order to measure ostracism and social exclusion, Ostracism Experience Scale for Adolescents was used (Gilman, Carter-Sowell, DeWall, Adams, & Carboni, 2013; Sertelin Mercan, 2016). This scale consists of 11 items and has two factors, and these factors were called ignored and exclusion. This scale was developed for adolescents, and the adaptation study was carried out with adolescents. Nonetheless, Kavakli (2018) stated that the scale could be used for university students. Furthermore, Kavakli (2018) points out that when the items of the scale are examined, it is seen that the ignored subdimension indicates ostracism and the exclusion subdimension indicates social exclusion more. Therefore, the ignored dimension in this research was expressed as ostracism and the exclusion dimension as social exclusion (Kavakli, 2018). In this study, Cronbach Alpha coefficient was found out as 0.86 for ignored subdimension and as 0.83 for exclusion subdimension. In order to measure depression, anxiety and stress, DASS-21 was used (Lovibond & Lovibond, 1995; Yildirim, Boysan, & Kefeli, 2018). This scale consists of 21 items and is 4 points Likert type, and the answers range from “*does not suit me at all*” (0) to “*totally suits me*” (3). Cronbach alpha values of DASS-21 was found out 0.86 for depression subscale, 0.85 for anxiety subscale and 0.87 for stress subscale in this study.

Procedure and Data Analysis

The questionnaire booklets were prepared considering the order effect. Prior to participation, all students received informed consent form stating the details of the study and that the participation is voluntary. Participants who were volunteer approved this form, booklets and informed consent forms were collected separately at the end. In the data analysis part, correlation analysis was carried out first. Afterwards, for the purpose of investigating the effects of ostracism and social exclusion on depression, anxiety and stress, hierarchical regression was conducted.

RESULTS

There are positive and significant relationships among ostracism and depression ($r=0.31$, $p<0.001$), anxiety ($r=0.24$, $p<0.01$) and stress ($r=0.25$, $p<0.001$) respectively. Similarly, there are positive and significant relationships among social exclusion and depression ($r=0.24$, $p<0.01$) and stress ($r=0.21$, $p<0.01$) respectively. However, there is no significant relationship between social exclusion and anxiety ($r=0.14$, $p>0.05$) (see also Table 1).

Three different hierarchical regression analyses were carried out in order to determine the predictive levels of ostracism and social exclusion on depression, anxiety and stress. In the first step, gender and age were put into the regression model as control variables. In the second step, ostracism was added to the regression equations. Lastly, social exclusion was added to the regression equations in the third step. The first hierarchical regression model was found out to be significant ($F_{(4-176)}=7.33$, $p<0.001$). Ostracism ($\beta=0.28$, $t=3.83$, $p<0.001$) and social exclusion ($\beta=0.19$, $t=2.63$, $p<0.01$) predicted depression significantly. Moreover, ostracism and social exclusion explained about 14 per cent of the total variance of depression ($R^2=0.143$). Social exclusion made a 3.4% contribution to the regression model in the last

Table 1: The relationships among variables employed in the study

	Mean	SD	1	2	3	4	5
1. Ostracism	7.01	2.46	-				
2. Social Exclusion	14.82	4.06	0.27***	-			
3. Depression	6.21	4.54	0.31***	0.24**	-		
4. Anxiety	5.11	4.45	0.24**	0.14	0.72***	-	
5. Stress	7.05	4.89	0.25***	0.21**	0.73***	0.79***	-

* $p<0.05$, ** $p<0.01$, *** $p<0.001$.

step ($p < 0.01$) (see also Table 2). The second hierarchical regression model was found out to be significant as well ($F_{(4-176)} = 3.67$, $p < 0.01$). Ostracism ($\beta = 0.24$, $t = 3.14$, $p < 0.01$) predicted anxiety significantly, but social exclusion ($\beta = 0.08$, $t = 1.10$, $p > 0.05$) did not. In the last model, ostracism and social exclusion seemed to explain approximately 8 per cent of the total variance of anxiety ($R^2 = 0.077$) (see also Table 3). The third hierarchical

regression model was found out to be significant, too ($F_{(4-176)} = 4.85$, $p < 0.01$). Ostracism ($\beta = 0.22$, $t = 2.99$, $p < 0.01$) and social exclusion ($\beta = 0.17$, $t = 2.22$, $p < 0.05$) seemed to predict stress significantly. Moreover, ostracism and social exclusion explained about 10 per cent of the total variance of stress ($R^2 = 0.099$). Social exclusion made a 2.5% contribution to the regression model in the final step ($p < 0.05$) (see also Table 4).

Table 2: Results of hierarchical regression analysis regarding depression

Variables	Depression						95% CI
	Step I		Step II		Step III		
	B	β	B	β	B	β	
Gender	-0.23	-0.02	-0.783	-0.07	-0.890	-0.08	[-2.48, 0.70]
Age	0.12	0.03	0.152	0.04	0.225	0.07	[-0.25, 0.70]
Ostracism			0.618	0.33	0.522	0.28	[0.25, 0.79]
Social Exclusion					.215	.19	[0.05, 0.38]
R2	0.002		0.109		0.143		
F	0.14		7.23***		7.33***		

CI, confidence interval; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 3: Results of hierarchical regression analysis regarding anxiety

Variables	Anxiety						95% CI
	Step I		Step II		Step III		
	B	β	B	β	B	β	
Gender	0.24	0.02	-0.18	-0.02	-0.23	-0.02	[-1.83, 1.37]
Age	0.19	0.06	0.21	0.06	0.25	0.07	[-0.23, 0.72]
Ostracism			0.47	0.26	0.43	0.24	[0.16, 0.70]
Social Exclusion					0.09	0.08	[-0.07, 0.25]
R2	0.004		0.071		0.077		
F	0.36		4.48**		3.67***		

CI, confidence interval; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 4: Results of hierarchical regression analysis regarding stress

Variables	Stress						95% CI
	Step I		Step II		Step III		
	B	β	B	β	B	β	
Gender	-0.20	-0.02	-0.67	-0.06	-0.77	-0.06	[-2.49, 0.94]
Age	0.20	0.06	0.23	0.06	0.30	0.08	[-0.21, 0.81]
Ostracism			0.53	0.27	0.44	0.22	[0.15, 0.73]
Social Exclusion					0.19	0.17	[0.02, 0.37]
R2	0.003		.074		0.099		
F	0.30		4.72**		4.85**		

CI, confidence interval; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

DISCUSSION

The results of hierarchical regression analysis showed that ostracism explained much more variance about depression, anxiety and stress. These results supported the hypotheses of this study. In this research, ostracism and social exclusion were examined with the expectation that the two concepts emerge as different types of exclusion. Results of correlation analysis (see also Table 1) show that ostracism is associated with depression, anxiety and stress. On the other hand, social exclusion is associated with depression and stress; however, it is not related to anxiety. Furthermore, ostracism predicts all dependent variables in this study (depression, anxiety, stress). Social exclusion also predicts depression and stress, but the contribution of social exclusion to the regression equations was limited compared to ostracism. This means that ostracism and social exclusion could be different exclusion types, and it can be said that ostracism influences people's depression, anxiety and stress levels more negative. There are some studies which state ostracism, social exclusion and depression, anxiety and stress are related concepts (Chung, 2018; DeWall, Gilman, Sharif, Carboni, & Rice, 2012; Feng, Jones, & Phillips, 2019; Nietlisbach & Maercker, 2009; Niu, Sun, Tian, Fan, & Zhou, 2016). Nonetheless, it appears that no studies have examined the effects of ostracism and social exclusion together on depression, anxiety and stress. Therefore, it is not possible to discuss the findings of this study comparatively.

At this point, some speculations could be made. As expressed before, in terms of social exclusion, people sometimes are excluded explicitly or implicitly by their groups, and these people are excluded from some or all activities of the groups. However, in terms of ostracism, people are ignored by their groups or by other people. According to need-threat model, experiencing ostracism affects some basic human needs such as self-esteem, need to belong, meaningful existence, and control. As expected, social exclusion has also affected these needs, but ostracism probably much more affects these needs. Because in the case of social exclusion, some reactions related to the cause of exclusion can be given to the person. At least, people who are exposed to social exclusion are aware of their exclusion, and there is no uncertainty entirely. On the other hand, the ostracised person does not know the reasons of ostracism, and this causes uncertainty. This type of exclusion could affect people's self-esteem, need to belong, control and meaningful existence much more negatively. When examining literature, it can be seen that studies examining the

differences of exclusion types are limited (Kavakli, 2019). In one of these limited studies, ostracism was found out to threaten the need to belong more than other types of exclusion, and ostracism threat control need more than social exclusion does (Kandemir, 2011). Moreover, some researchers suggest investigating the differences of exclusion types would be useful and valuable in order to better understand the underlying mechanisms of these concepts (Wesselmann, Michels, & Slaughter, 2019).

Ostracism could influence control need more negatively than social exclusion (Kandemir, 2011) because as mentioned above, ostracism consists of ignored and uncertainty. In other words, there is no causal clarity in ostracism condition (Williams & Zadro, 2001; Williams, 2007). This type of uncertain situations may trigger more threat to the need for control. Since there is no knowledge of the person under ostracism condition, there is no perception of control over the relationship (Ren, Wesselmann, & Williams, 2018; Zadro, Williams, & Richardson, 2004). In the case of social exclusion, the individual is likely to have more perceptions regarding control compared to the case of ostracism, even if the individual experiences exclusion. Moreover, this research's participants composed of university students. A university is a place where students can quickly become members of new groups, and often join more than one group. Even if students are excluded by a group, they can easily find another group, and they can easily subscribe to new groups. For these reasons, students who are exposed to social exclusion can feel a lower level of threat about their need for control. This situation may less affect their depression, anxiety and stress levels. In addition, social exclusion was not found to be related to anxiety in this research, the finding of which also supports the perspective mentioned above. Uncertainty may trigger anxiety, and may also be experienced as anxiety (Hirsh, Mar, & Peterson, 2012), but in the process of social exclusion, sense of control can eliminate or reduce uncertainty. In this way, when people experience social exclusion, their depression and stress levels increase, but anxiety levels may not be affected. Nevertheless, in ostracism condition is valid vice versa.

CONCLUSION AND LIMITATIONS

As a result, it was concluded that ostracism influences depression, anxiety and stress more negatively. People who are subject to ostracism could face more negative results. Furthermore, it can be concluded that ostracism

and social exclusion emerge as different exclusion types. On the other hand, some limitations of this study should be better to be mentioned. Firstly, ostracism and social exclusion were measured by a self-report scale. In other words, this research measured participants' perceived ostracism and perceived social exclusion levels. Future studies should focus on experimental studies in order to obtain more explanatory results. Secondly, this research's participants composed of university students, and most of these students are female. Although age and gender were controlled, there is a limitation at that point, because most of the participants were in a similar period of age, therefore in a developmentally similar period. Besides this, the number of genders is not balanced either. These are limitations, and results obtained in this study should better be evaluated considering these limitations.

Ethics Committee Approval: This study was carried out in accordance with the 1964 Helsinki declaration.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

Peer-review: Externally peer-reviewed.

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