

PSYCHOMETRIC PROPERTIES OF AN ADAPTED  
YEMENI VERSION OF REJECTION SENSITIVITY  
QUESTIONNAIRE

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FACULTY OF EDUCATION  
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YEMENI VERSION OF REJECTION SENSITIVITY  
QUESTIONNAIRE

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**ORIGINAL LITERARY WORK DECLARATION**

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Psychometric properties of an adapted Yemeni version of rejection sensitivity questionnaire.

Field of Study: Measurement and Evaluation

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## ABSTRACT

Early rejecting experiences in significant relationships contribute to the development of rejection sensitivity (RS). Rejection sensitivity is the disposition to anxiously expect, perceive, and strongly react to rejection. The purpose of this study was to evaluate the psychometric properties of the Adapted Yemeni Version of Rejection Sensitivity Questionnaire (Y-RSQ) with adults through assessment of the measure's reliability, validity, and utility. The measure that was used to help determine the validity of the Y-RSQ was the social anxiety (SA) questionnaire. The Y-RSQ and SA questionnaires were completed by a sample of 571 Yemeni students (males and females) at Sana'a University. Internal consistency reliability was calculated for the Y-RSQ and was satisfactory for research purposes the overall reliability being .82. 67% of the variance in observed total scores was due to the common factors, which indicated Y-RSQ has criterion-related validity. A Pearson Product Moment Correlation was performed between the Y-RSQ and SA scores. The analyses indicated a moderate, but significant positive relationship between Y-RSQ and SA ( $r = .50, p < .01$ ). The findings of the confirmatory factor analysis indicated that the factor structure of the RSQ can be represented by a bifactor model: general rejection sensitivity factor and two group factors, rejection anxiety and expectancy of rejection. The findings suggested that the construct validity of the Y-RSQ is acceptable and that anxiety and expectation of rejection could bias people to readily perceive and strongly react to signs of rejection in different ways.

**Keywords:** rejection sensitivity, validity, reliability, social anxiety, psychometric properties.

**CIRI-CIRI PSIKOMETRIK SOAL SELIDIK SENSITIVITI PENOLAKAN  
(REJECTION SENSITIVITY) VERSI YAMAN**

**ABSTRAK**

Pengalaman penolakan awal dalam hubungan penting menyumbang ke kejadian sensitiviti penolakan (rejection sensitivity). Sensitiviti penolakan merupakan sejenis personaliti yang kerap bimbang kerana menjangkakan penolakan, sering merasakan penolakan, dan memberi reaksi yang kuat terhadap penolakan. Tujuan kajian ini adalah untuk menilai ciri-ciri psikometrik Soal Selidik Sensitiviti Penolakan yang diadaptasi ke Bahasa Arab untuk digunakan dengan golongan dewasa Yemen (Y-RSQ) melalui penilaian kebolehpercayaan, kesahan, dan utiliti. Soal selidik yang digunakan untuk menentukan kesahan Y-RSQ ialah soal selidik kebimbangan sosial (SA). Soal selidik Y-RSQ dan SA telah dijawab oleh 571 orang pelajar lelaki dan perempuan dari Universiti Sana'a. Kebolehpercayaan ketekalan dalaman Y-RSQ diukur dan didapati memenuhi tujuan kajian dimana kebolehpercayaan secara keseluruhan adalah .82. 67% daripada varians dalam jumlah skor yang diperhatikan (observed total score) adalah disebabkan oleh faktor-faktor umum yang menunjukkan bahawa Y-RSQ mempunyai kesahan kriteria. Korelasi Pearson dijalankan antara skor Y-RSQ dan SA. Analisis tersebut menunjukkan hubungan yang sederhana tetapi positif dan signifikan antara Y-RSQ dan SA ( $r = .50, p < .01$ ). Dapatan kajian daripada Confirmatory Factor Analysis (CFA) menunjukkan struktur faktor RSQ boleh diwakili oleh model bifaktor iaitu faktor umum sensitiviti penolakan serta dua faktor kumpulan (kebimbangan penolakan dan jangkaan penolakan). Dapatan kajian mencadangkan kesahan konstruk Y-RSQ boleh diterima dan kebimbangan serta jangkaan penolakan boleh menyebabkan individu cenderung untuk merasai dan memberi reaksi yang kuat terhadap tanda-tanda penolakan melalui pelbagai cara.

**Kata kunci:** sensitiviti penolakan, kesahan, kebolehpercayaan, kebimbangan sosial, ciri-ciri psikometrik.

Universiti Malaya

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## LIST OF SYMBOLS AND ABBREVIATIONS

RS	:	Rejection sensitivity
HRS	:	High rejection sensitivity
LRS	:	Low rejection sensitivity
SA	:	Social anxiety
SAD		Social anxiety disorder
SR	:	Social rejection
RE	:	Rejection expectancy
RA	:	Rejection anxiety
DMS	:	Defensive motivation system
CAPS	:	Cognitive-Affective Processing System
DACC	:	dorsal anterior cingulate cortex
ACC	:	anterior cingulate cortex
Y-RSQ	:	Yemeni version of rejection sensitivity questionnaire



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## CHAPTER 1

### INTROCUCTION

#### 1.1 Background of the Study

Relationships with other people in a social context, in the most basic sense, serve our existence and proliferation; which are considered as having an evolutionary advantage (Wesselmann, Nairne, & Williams, 2012) as people rely on others for their survival and prosperity (Olsson, Carmona, Downey, Bolger, & Ochsner, 2012). Therefore, framing and keeping up affirmative and enduring connections is an essential human impulse (DeWall et al., 2012), just as the need for nourishment, home, and water, the need for belonging is profoundly established in human beings' developmental history (DeWall et al., 2012). The longing to accomplish acceptance and to obviate repudiation is likewise broadly recognized to be a focal human motive (Khoshkam, Bahrami, Ahmadi, Fatehizade, & Etemadi, 2012; Merkosky, 2013; Natarajan, Somasundaram, & Sundaram, 2011). Individuals are susceptible to social rejection (SR) since social glue is basic for humans (Kawamoto, Nittono, & Ura, 2015). However, endeavors to interface with others and enroll their assistance and acceptance hold the possibility of rejection, since the probability and actuality of rejection can strongly influence and form our social behavior (Olsson, Carmona, Downey, Bolger, & Ochsner, 2013).

In present-day life, SR has an influence on our psychological adjustment in different ways, by heightening dejection, mortality, and hostility (Kawamoto et al., 2015). Nevertheless, individuals have different levels of predisposition to see and react to rejection. Some individuals interpret unwanted interpersonal events kindly and retain their composure afterward; others promptly comprehend deliberate rejection, even in envisioning insensitivity from the valued people in their life. In this way,

people's relationships and prosperity can be compromised since they react in an exaggerated manner. The individual's predisposition to see and exaggeratedly react to rejection is encouraged by the inclination to tensely or anxiously expect rejection by their valued individuals (Natarajan et al., 2011). Real rejection can be provoked by the changes in the patterns of behavior that are caused by an individual's inclinations towards excessive sensitivity (Ng & Johnson, 2013). The expected dread of rejection can and will influence people's participation and interaction with relatives, friends, and outsiders, as well as their selection of activities, avocation, and interests. It is simple to see how the threat of encountering rejection is the principles that rejection sensitive people's go through (Weeks, 2011). Comprehending the phenomenon of rejection sensitivity (RS) from a direct point of view has amplified the knowledge of individuals' personality and counseling (Merkosky, 2013).

Belongingness is an essential requirement for people, if this objective is not accomplished, a feeling of being rejected is generated which is considered as a hurting experience (Sun et al., 2014). Additionally, rejection is an inherently unpleasant experience in which individuals learn in childhood how to respond to various levels of adversity (Gupta, 2008). A child starts to assume and think that he or she is distinctive, inadmissible, isolated and unloved when s/he faces rejection. Early rejection experience for the child expressed-needs by caregivers, leads adolescents to develop expectations that people will reject them when they look for acknowledgment. Therefore, they put a high incentive on rejection avoidance (Erozkan, 2009).

Rejection sensitivity occurs in relationships between parents and children through childhood. The individuals who encounter or face consistent rejection from parents during childhood are anxious and expect rejection in relationships with others (Yu, Youk, & Lee, 2016). High-level of parent-child closeness as stated by Lee and

Chun (2016) has been positively correlated with adequate interpersonal relationships; however, Kim and Lee (2011) indicated that parent-child relationships, self-differentiation, interpersonal competence in college students, and competence in interpersonal connections have been negatively correlated with rejection sensitivity. In this manner, parent-child intimacy could be viewed as an effective component in college students' rejection susceptibility (Yu et al., 2016).

RS is a construct developed from attachment and social cognitive learning perspectives that is conceptualized as a tendency to protectively predict (i.e. angrily or anxiously), promptly perceive and react excessively to experiences of potential rejection in social situations (Innamorati et al., 2014). It also refers to the individual's vulnerability to anxiety regarding rejection in meaningful relationships, for example, the relationships with parents, peers, siblings, instructors, and spouses (Yu et al., 2016). Studies across the recent four decades have demonstrated that rejecting relationships with friends and schoolmates influence psychological and social adaptation through childhood as well as adolescence rather than including relationships (Zimmer-Gembeck, Nesdale, Webb, Khatibi, & Downey, 2016). For instance, when rejection occurs in valued relationships with others, this can influence people's conceptualizations of relationships and their expectancy of others, particularly in childhood, so part of these ideations has been inferred as RS (McLachlan, Gembeck, & McGregor, 2010).

Downey and Feldman (1996) propose RS as a personality disposition, which demonstrates the cognitive-affective processing biases that escort attachment anxiety and low self-esteem. The educated anticipation demonstrates itself in circumstances where the individuals feel that they are at hazard for rejection in different relationships. In particular, when high RS people look for support and acknowledgment from others,

they believe that they will most likely be rejected. These convictions lead to negative expectancies and evasion of circumstances where the possibility of rejection exists (Lazarus, 2011). People can testify rejection by others in different occasions such as "broken-hearted and distressing" after ending a relationship, "hurt feelings" after an individual has been eliminated from a circle of friends, or "a slap in the face" when someone has refused his/her invitation (Rosenbach & Renneberg, 2011). Variation in parenting styles, life experiences, and individual readiness generate diverse levels of susceptibility to rejection. A few people keep their composure while others might experience a more negative impact (Sun et al., 2014).

Early rejection experiences form how people value, predict, and encrypt new social circumstances, and how they respond towards them. People with a long history of rebuff readily comprehend SR signs or also anticipate being frequently rejected by others. People either obviate situations in which rejection is possible or seriously look for confirmation that they will not be rejected in such circumstances (Sanyal, Fernandes, & Khimani, 2016). Thus, if a learning history appraised with experiences of rejection, an individual high in RS finds how to anticipate rejection in social circumstances. There is one common postulation shared by all these theories, i.e. when the need for belonging (or the interpersonal value) abides imperishably unfulfilled; the individual experiences various negative consequences. While support and acceptance from others besides the incorporation into an effective social network to enhance psychological and physical happiness, the experience of rejection and indifference can cause suffering psychologically and physically feebleness of a person. As indicated by these theories, sensitivity to rejection develops from rejection experiences in childhood and underlies interpersonal difficulties in adulthood (Shade, 2010).

Though everyone experiences rejection, a minority reacts with composure, while others react in ways that significantly compromise their prosperity and connections (Downey, Mougios, Ayduk, London, & Shoda, 2004). Therefore, the same thing might be applicable to Yemeni society since it is a conservative society, as well as the political situation and social life have become complicated due to the civil war since 2011, which has led to huge social and economic obstacles. Armed conflict and crises generate an extensive range of problems encountered at the individual, family, community and social levels. The social and psychological impacts of emergencies might be severe in the short-term, but they can also sabotage the long-range psychosocial well-being and mental health of the affected people. Mental disorders explain four of the ten important sources of infirmity worldwide; nonetheless, psychological health is among the most under-resourced areas of healthcare especially in third world countries in ordinary times, and particularly in emergencies (UNHCR, 2011).

World health organization (WHO) (2015) estimates published in The Lancet show that there are many individuals living with psychological disorders in regions affected by conflict than we formerly thought many more. One individual in five is living with some form of psychological disorder, from mild depression or anxiety to psychosis. Worse, nearly 1 in 10 is living with a moderate or severe psychological disorder. These people desperately need to be able to obtain medication and care. Their disorders often ruin their ability to function so access to care isn't just about improving mental health, it can be a matter of survival. In many countries in the world, ignorance about mental health and mental illness remains widespread. The uptake of mental health care during conflict and other emergencies, in countries where such support has been limited, can lead to the identification of people who are tied up, locked in cages,

or hidden from society. In many cases, it is this very support that helps dispel myths about mental illness and leads to treatment and care and a path towards a more dignified life (Ommeren, 2019). The scores of people in Yemen have mental health challenges but have limited mental health services at all levels. The much needed interventions remained out of focus in the past due to lack of sensitization (WHO, 2015).

Columbia University's Mailman School of Public Health (2017) introduced a conference paper on "The Impact of War on Mental Health in Yemen: A Neglected Crisis". In this paper, they disclose how the risk to psychological health in Yemen is serious. Hitherto, psychological health services in Yemen have been limited, and there are few studies on the impact of the recent civil war on the psychological health of the population. There are diverse well-known consequences resulting from unaddressed poor psychological health, including impacts on family unity, physical health, education, involvement in the workforce, and peace and dispute settlement efforts (Columbia University's Mailman School of Public Health, 2017).

Therefore, all these factors might contribute to RS among Yemeni people and result in unstable social relationships among families, friends, and neighbors. People have split into two broad parties: (i) those who support the ousted president and (ii) those who are the protesters. Therefore, some people have become more sensitive and avoid expressing their opinions or showing their real attitudes toward certain issues in order to avoid fighting with others and being rejected. Another factor that can trigger RS in Yemeni society is the conservative culture of this society in which stereotyped gender roles are the norm. Even though women enjoy some of their rights, they still struggle despite barriers and the prevailing perspective of society (Khalil, 2010). The conflict exacerbated social and economic disparities, depleted resources and made

room for negative coping strategies. Conflict can strain personal relationships. Reporting of gender-based violence is also socially unacceptable but increased again by 36% in 2016 compared to 2017. According to a recent survey of women in 9 Yemeni governorates, family members - especially husbands - are potential perpetrators (UNDP, 2018).

## **1.2 Problem Statement**

RS is assumed to emerge as a consequence of a person's exposure to situations in which the emotional or physical acts of others, either obvious or hidden, and active or passive, communicate rejection (Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010a). Both theoretical and empirical studies have implied that rejection sensitivity emerges from early neglected and rejected experience with important others, including caregivers and close friends (Sun et al., 2014). The person's point of view on confrontation rejection and the elucidation of the rejection experience differ to an extreme level. Highly rejection sensitive people have an inclination to be excessively mindful of social refusal signs and regularly respond improperly as a reaction to their own understanding of rejection. They were found to have a prolonged history of frequent rejection experiences and are susceptible to psychological anxiety (Rosenbach, 2014).

The main point of the readiness to expect rejection is the concerned anticipation when individuals expect to be excluded by essential individuals in their life, and expectancy produced through the exposure to extreme and lengthened repudiation (Downey, Freitas, Michaelis, & Khouri, 1998a). RS distinguishes the sorts of social gestures that will get attention and the probability that an interpersonal interaction will be understood as a repudiation (Downey, Khouri, & Feldman, 1997). Nevertheless, a significant phase of rejection experiences theory proposes that intense as well as



extensive repudiation experiences incite rejection sensitivity (RS) (Downey, Bonica, & Rincon, 1999).

It is conceivable that RS intermediate social anxiety (SA) disorder, as SA has many common components or aspects that are similar to the recently settled construct of RS in social psychology. Children and adults who comprehend parental refusal, particularly refusal of them instead of their behavior, will probably evolve perspectives of themselves as awful, dishonorable, or unlikable (Rohner, 2004). Resulting interpersonal patterns can become distinctly inflexible and incorrect evidence for explaining or understanding interpersonal circumstances, to such an extent that people might engage in new or vague social situations with anticipation of rejection and understanding of aggression in others (Pachankis, Goldfried, & Ramrattan, 2008). This could illustrate why studies have indicated rejection by parents is linked with borderline personality disorder (BPD), depression, SA disorder, and RS to a great extent resulting in the misrepresentation of comprehension and expectancy of others (Lieb et al., 2000).

Different lines of research have not conveyed an impact of RS on the level of relationship (e.g., Downey & Feldman, 1996), which may explain why few individuals with high RS can preserve prolonged relationships. Subsequently, few people high in rejection sensitivity may possess a few qualities or abilities that support them and prevent some of the sequels of refusal sensitiveness. This characteristic may additionally empower them to participate in healthy interpersonal procedures. For example, affirmative communication patterns would permit them to persevere with relationships and possibly effectively overpass complicated interactions, which might be seen as a rejection. For instance, an earlier research observed that people with high RS and executive control (e.g., emotion regulation skills, instinct control, and so forth)

are less inclined to participate in negative conduct (e.g., antagonistic, self-harm, withdrawal, and so on) than high-rejection sensitive people and are low in executive control (Christman, 2012).

In one of the previous studies, university students who had developed a secure attachment showed low RS (Erozkan, 2009), and in another study Park (2011) pointed out high rejection sensitivity was correlated with high attachment anxiety and attachment avoidance (Yu et al., 2016). Children that are sensitive to rejection additionally demonstrate heightened distress after being rejected by peers. They also carry on behaving in a hostile manner and face incremental relational challenges and decreases in educational functioning after a while (Downey, Lebolt, Rincón, & Freitas, 1998b). Additionally, Kim (2015) denoted that college students with high rejection sensitivity have appeared to exhibit a high propensity to repress their own feelings on account of fear of rejection, and this was a critical element for suicide-related incidents (Yu et al., 2016).

High sensitivity to rejection extends a negative impact on interpersonal connections. While men with high rejection sensitivity have a tendency to act forcefully when they perceive hostility and repudiation, women exhibit depression, threat, or excessive acceptance attitudes (Downey et al., 1999). The individuals with high anxiety levels about being rejected would probably be more likely to avoid particular words related to repudiation (e.g., ignored, unwanted, rejected, disliked, shunned) than individuals with low levels of anxiety about rejection. The high rejection sensitive people (HRS) were found to express greater attentional interference with rejection-specific words than with either neutral or negative words (Berenson et al., 2009). Different studies have found that attentiveness was focused away from the area where the threatening stimulus was exhibited (Pine et al., 2005). This proposes

that individuals who feel threatened by the likelihood of rejection may under-report their concerns and anxiety over rejection by an inclination to concentrate attention far from the previously mentioned distressing stimulus (Yu et al., 2016).

Longitudinal and cross-sectional studies likewise have demonstrated that RS is a solid danger factor for psychological maladaptation between young people including social withdrawal, internal distress, and loneliness (London, Downey, & Bonica, 2007), melancholy, symptoms of anxiety, and a reduction in social productivity. A previous study made sense of supporting the negative impact of dismissal affectability. Through a three-year longitudinal review, RS in late adolescence was found to be associated with a relative increment in the symptoms of anxiety and depression. This was found even after explaining the adolescents' essential levels of social efficacy (Marston, Hare, & Allen, 2010). For instance, RS has been reported to have a positive correlation with symptoms of depression, and this association was slightly intervened by self-silencing behavior (Harper, Dickson, & Welsh, 2006). Self-silencing may act as an approach to turn away from the venture and closeness in the relationship or may fill in as an approach to be consistent in order to preserve the relationship, and both techniques have been depicted as a control system to evade the excruciating impacts of rejection (Christman, 2012).

People with high RS might react to actual rejection or rejection threats in ways that risk their happiness. Besides the contribution to psychological suffering, self-directed hostile cognitions and corroding self-esteem might also escalate the possibility of a more obvious self-harmful behavior (Breines & Ayduk, 2015). A past study has also focused on the long-run consequences of early peer rejection experiences and found associations between rejection and future academic performance, externalizing issues such as hostility, and internalizing problems such as

depression, loneliness, and self-concept (Mellin, 2012). RS not only is a significant factor in the understanding of human social behavior generally but is also a risk factor for psychological unhealthiness, in particular among susceptible populations. The differences between the individual in RS and hypervigilance for cues of rejection have been specified as depression predictors (De Rubeis et al., 2017).

Furthermore, the literature review implies that RS has been observed to have a relationship with various psychological disorders, fundamentally social anxiety, depressive symptoms, neuroticism, borderline personality disorder (Rosenbach & Renneberg, 2011), distress, avoidant personality disorder, and psychopathology (Posternak & Zimmerman, 2002), depression (Ayduk, Downey, & Kim, 2001), distress escalated and negative affectivity (Gilbert, Irons, Olsen, Gilbert, & McEwan, 2006), intensive aggressive behavior (Ayduk, Gyurak, & Luerssen, 2008), and heightened physiological reactions to social experiences (Slavich, Eisenberger, & Taylor, 2010). According to the diagnostic and statistical manual of mental disorders (DSM-IV), RS is an atypical feature of the disorder of major depression. Furthermore, people who have SA or a BPD are very susceptible to negative evaluation and to SR (American Psychiatric Association, 2013). The longitudinal associations between rejection sensitivity and loneliness, anxiety, and depression were stabilized over time (Gao, Assink, Cipriani, & Lin, 2017). Hence, RS plays a major role in many psychological and mental disorders; it is likely that it might contribute to the increase in the number of psychiatric patients in Yemen. According to Alrai Press (2014), the rate of psychiatric patients in Yemen has significantly increased; in 2013 the number of patients was 200,000; while Shwail (2014), denoted that the number of psychiatric patients has rapidly increased since the civil war started, around 500,000 suffered from mental disorders and 1,500,000 from neurosis disorders.

The World Health Organization (WHO) has noticed that there is a scarcity of epidemiological information on mental ailments in Yemen in the globally accessible literature. Thus, currently, it is very hard to evaluate the overall mental health status in Yemen. Whereas the available information on the general state of mental health in Yemen is insufficient, the existing data proposes that many people in Yemen are likely to be suffering from adverse emotional well-being and psychosocial sequels. For example, the director of Al-Amal psychiatric hospital stated a remarkable increment in the number of patients in Sana'a during the pre-war period. The rates of suicide in the capital increased by about 4.5% from 2104 to 2015 according to mental health experts and sources at the Ministry of Interior. The Global Burden of Disease study (2015) indicated that there is a significant positive relationship between anxiety and depression and conflict. Though psychological distress is widespread among most people who are exposed to catastrophes, an accumulated proof demonstrates that 15-20% of them develop slight-to modest mental disorders such as stress, post-traumatic stress disorder, anxiety, and depression. Moreover, 3-4% develop serious mental disorders, such as anxiety, depression, and psychosis or debilitating symptoms that impact their capacity to endure and function (Sana'a-Center For Strategic studies, 2017).

Conflicts may lead RS individuals to probably comprehend them as occasions for others to reject them instead of as chances for settling complications in the relationship. Therefore, their anxiousness about rejection combined with their predisposition to exaggerate their reaction to perceived rejection would boost demeanor that compromises effective conflict resolution (e.g., refusing to talk about the problem, blaming, or threatening harm) (Kowalski & Leary, 2004). The current conflicts in Yemen are connected to the increment of sensitivity and the prevalence of

different psychological disorders especially anxiety and depression (Sana'a-Center For Strategic studies, 2017) and both of these most common disorders are linked to RS. Therefore, the problem of the current study lies in the persistent demand to provide psychiatrists, counselors, and researchers with a tool that can help them to test or measure rejection sensitivity amongst Yemeni people.

Even though many studies have been conducted to validate rejection sensitivity questionnaire (RSQ) in different contexts, such as the Italian version by Innamorati et al., (2014), the German version by Staebler, Helbing, et al, (2011), the Persian version by Khoshkam et al. (2012), the Korean version of rejection sensitivity by Lee (2000) and the Turkish version by Erozkhan (2004), to date, no study has carried out the psychometric properties of the RSQ in the Yemeni culture in particular and in the Arabic culture in general. Further, there is no instrument yet based on Yemeni culture that can be used to measure RS. Presuming that expectancies of rejection might be culture-specific as RSQ was developed and administered in a foreign culture (U.S), which is completely different from the Yemeni culture, the application of this scale as it is will be inappropriate for the Yemeni environment because it contains some items that are incompatible with the Islamic rules and the customs which prevail in the country. The current study aims to adapt and validate the RSQ that was developed by Downey and Feldman (1996) on university undergraduate students in Yemeni societal culture to make it culture fare and suitable for this conservative environment. Downey and Feldman (1996) explained their findings as support in favor of the unidimensionality of the RSQ, although the analyses performed on the overall sample and separately for each sex resulted in some factor loadings in the range .30 – .40, proposing a less homogeneity of content. However, the current study aims to confirm whether the adapted Yemeni version of RSQ (Y-RSQ) represents a one-factor model

as some changes have been made to the original questionnaire. These changes are discussed in detail in Chapter three.

### **1.3 Research Objectives**

The objectives of the current study are to adapt and investigate the validity and reliability of the rejection sensitivity questionnaire (RSQ) in the Yemeni culture. These objectives are outlined as follows:

- 1- To determine the reliability of the adapted Yemeni version of RSQ.
- 2- To determine the validity of the adapted Y-RSQ, specifically, to establish:
  - (1) Content validity.
  - (2) Concurrent validity.
  - (3) Construct validity.
- 3- To determine whether the underlying factors of the adapted Y-RSQ are a one-factor correlated model, a two-factor correlated model or a bifactor model.

### **1.4 Research Questions**

The research questions are delineated as follows:

- 1- What is the reliability of the adapted Yemeni version of RSQ?
- 2- What is the validity of the adapted Y-RSQ in terms of
  - (1) Content validity?
  - (2) Concurrent validity?
  - (3) Construct validity?
- 3- Do the underlying factors of the adapted Y-RSQ represent a one-factor correlated model, a two-factor correlated model or a bifactor model?

### **1.5 Significance of the Study**

One of the crucial reasons to conduct this study and learn more about RS is that past researches have proposed that rejection sensitivity is a factor that can threat

psychological adaptation challenges in youth (Evans, 2001; Marston et al., 2010; Rimm-Kaufman & Kagan, 2005; Weeks, Coplan, & Kingsbury, 2009). People with rejection sensitivity are frequently portrayed as shy, anxious, and tend to be invisible to instructors. RS can, in this manner, have negative ramifications on youths' academic and social achievement, especially concerning receiving support for both academic and social difficulties in school (Evans, 2001; La Greca, Dandes, Wick, Shaw, & Stone, 1988; Marston et al., 2010; Rimm-Kaufman & Kagan, 2005; Sandstrom, Cillessen, & Eisenhower, 2003; Weeks et al., 2009).

The purpose of the current study is to examine the validity and reliability of RSQ. One particular focus was to make this questionnaire suitable for Yemeni society. In order to adopt a broader viable or useable wording more appropriate for use in Yemen, the researcher has eliminated those situations in the US questionnaire regarding dating and added extra items about possible rejection situations in typical Yemeni adult lives. Therefore, this study provides Yemeni society in particular and Arab societies in general with an adapted version of the RSQ, which will help them to assess RS. This study is also very important because to date, the psychometric properties of the RSQ have not been carried out neither in Arabic countries nor in Yemen. Furthermore, this study will provide counselors and psychiatrists with a tool that can help them to assess rejection sensitivity among students.

## **1.6 Conceptual Framework of Rejection Sensitivity**

The structure of the RSQ factors might be indicated by a bifactor, which represents a general RS factor and two group components rejection expectancy (RE) and rejection anxiety (RA) (Innamorati et al., 2014). In this study, the rejection sensitivity questionnaire will be validated by using social anxiety (SA), since socially anxious people, like RS-anxious people, likewise look at their environment for hints of SR, for



example, social threat words, emotional features, memories and anticipation of rejection and failure (Baldwin & Main, 2001; Hirsch & Clark, 2004). SA as well heightens susceptibility to SR signs because of its effect on cognitive and affective processing (Bowker, Thomas, Spencer, & Park, 2013; Costello, Egger, & Angold, 2005; Shahar, Blatt, Zuroff, Kuperminc, & Leadbeater, 2004).

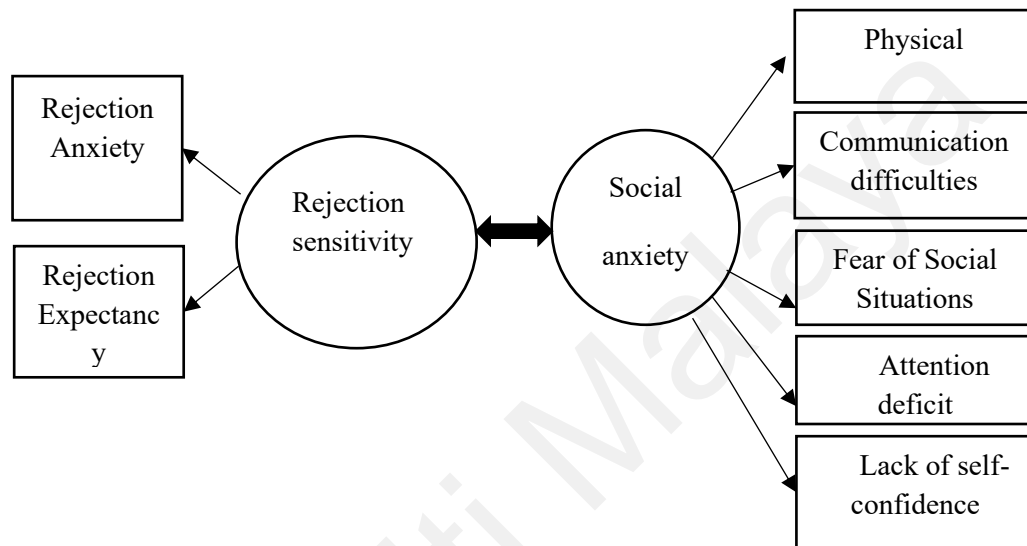


Figure 1.1: Rejection sensitivity conceptual framework.

### 1.7 Delimitation and Limitations of the Study

Several researchers have studied rejection sensitivity from different aspects; however, in this study, a Y-RSQ is administered to a sample of adults so studies that use the original version of the RSQ might reveal different results from those presented here. This study is limited to undergraduate students at Sana'a University's Faculty of Art and Human Science, Faculty of Engineering, Faculty of Medicine, Faculty of Commerce and Economic, and Faculty of Education which is based in Sana'a governorate. Therefore, the result of this study might not be applicable for adults from other districts or regions in Yemen or students at different education levels since the respondents were selected conveniently due to access limitation and schedule constraints. Besides that, one of the major limitations in the current study is the

ongoing civil war in Yemen that restricts the current sample to only one governorate and one university as the chaos prevails in the other provinces and it is difficult, as well as, unsafe to travel between the provinces. For this reason, convenience sampling was used in the current study which limits the generalization of the findings to the targeted population.

## **1.8 Operational Definitions of Terms**

Operational definition is the specification of how a researcher will define and measure the variables of the study. Several terms are used in the current study which should be understood properly. A brief definition is provided for each construct to help readers in their understanding and interpretation of the study.

### **1.8.1 Rejection sensitivity**

Individuals vary in their inclination to understand and respond to rejection. Some persons understand unwanted interpersonal experiences kindly and keep composure. Others quickly understand intended rejection in the trivial or unreal insensitiveness of their important others and react excessively in aspects that settle their relationships and happiness (Romero-Canyas et al., 2010a). RS is commonly related to psychological problems and other undesirable outcomes such as relationship separation, escalating depression, hostility, and death (Kawamoto et al., 2015). In this study, RS is the propensity to anxiously expect, readily perceive, and overly react to SR signs. It is measured by RSQ that was developed by Feldman and Downey (1996). It has two components namely RA and RE. RA refers to the degree of concern or anxiety about the outcome of the situations in rejection sensitivity questionnaire. Whereas, RE refers to the possibility that other people would respond in an accepting way to the situations of the RSQ (Downey & Feldman, 1996).

### 1.8.2 Social anxiety

Social anxiety (SA) is portrayed by an insistent fear of one or more social or performance situations with exposure to unknown people or to possible inspection by others. Individual who has SAD fears that s/he will act in a way that will be embarrassing or humiliating and exposure to the feared situations almost consistently trigger anxiety, which can cause panic attacks (Cremers & Roelofs, 2016). In this study, SA defined as the fear of being negatively evaluated by others and it is measured by social anxiety questionnaire that was developed by Radwan (2001). Social anxiety includes physical symptoms of social anxiety, difficulty of communication and self-expression, fear of social situations and interactions in them, attention deficit or dispersion of ideas, and lack of self-confidence (Radwan, 2001).

### 1.8.3 Psychometric properties

Psychometrics is frequently involved in assessing person's personality, ability, knowledge, and types of behaviors. Measurement typically takes place in the form of a questionnaire, and forms must be assessed broadly before being able to indicate that they have excellent psychometric properties, meaning a scale is both reliable and valid. Psychometrics in this study is defined as the development and validation of measurement instruments and evaluating whether these instruments are reliable and valid forms of measurement (Ginty, 2013).

## 1.9 Summary

This chapter present an extensive background of rejection sensitivity; moreover, it discusses some studies findings that have investigated rejection sensitivity and its correlation with other variables. The aim of the current study was to adapt and validate the rejection sensitivity questionnaire to make it suitable for use in the Yemeni context. In order to provide psychologists, counselors, and scholars with an instrument that can

help them to measure rejection sensitivity among university students. Several studies have validated the rejection sensitivity questionnaire and identified the relationship between RS and other psychological disorders. However, no studies have addressed rejection sensitivity in Arab countries including Yemen. In this study, the researcher provides comprehensive literature for rejection sensitivity and describes the process of validating the rejection sensitivity questionnaire.

Universiti Malaya

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This section will begin with an overview, further discussion regarding the theoretical framework of the RS construct and a presentation of the literature related to this construct.

#### 2.2 Rejection Sensitivity

Downey and Feldman define RS as a dispositional propensity to anxiously anticipate, quickly recognize, and react excessively to experiences of conceivable rejection (Downey & Feldman, 1996; Feldman & Downey, 1994). This definition is problematic, as the definition indeed depicts the cognitive-affective-behavioral model characteristic of a high rejection sensitivity level. Essentially, the definition fails to straightforwardly depict the cognitive-affective behavioral model's traits for an individual low in RS. If each individual comes into this world with susceptibility to rejection (high or low), they break down somewhere on the RS continuum.

The basic anxiety about dereliction, disloyalty, abasement, and abuse, produces a painful sensitivity to any rejection, and leads to maladaptive orientations in relationships, regardless of how trivial. Furthermore, troubling experiences with early caregivers evoke the formulation of "basic mistrust" in others and that prompts sensitivity to rejection. Another factor that might lead to rejection is the generalized predictions or "personifications" of valued people as meeting needs or as punitive, refusing, or disapproving, which form the foundation of how people comprehend rejection and connect with others. Exposure to family violence or parental rejection in childhood also contributes to heightened RS (Feldman & Downey, 1994).

People respond to SR in different ways (Downey et al., 1998b), some are objective and calm in response to rejection cues, while others are impervious to potential rejection cues, unless the cues directly threaten their social status (Downey et al., 1997; Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997). The RS construct was introduced as a cognitive-affective predisposition of people that distinguishes between individuals in their severity with which they predict, understand, and react to SR (Macdonald, Kingsbury, & Shaw, 2005a). Responses to RS depends on the level of sensitivity to rejection, for the high rejection sensitive (HRS) individuals, the real experience or impendence of rebuff leads to excessive pressure in their everyday lives. Once high rejection-sensitive individuals are rejected, they normally respond with aggression and hostility against the representative of the perceived rebuff. Not everybody demonstrates a similar level of intensity or behavioral indication of the response, yet an antagonistic feeling continues. HRS people specifically are mindful of hints of rejection and will probably encounter those signs as a further physiological threat (Romero-Canyas et al., 2010a).

The level of an individual's RS is associated with various manners of behavior. HRS triggers responses to rejection which can be either aggression or avoidance and passive responses (Downey, Feldman, & Ayduk, 2000). When HRS people confront potential rejection, negative plans become attainable (Pietrzak, Downey, & Ayduk, 2005) in which rejection expectancies are consequently activated or provoked. Accordingly, once negative or vague situations propose repudiation, HRS people react in maladjustment ways (Downey et al., 2000) which may harm both their well-being and relationships (Downey et al., 1998a). On the other hand, LRS people report less useless cognitive biases as well as probability and promptly predict acceptance rather than rejection in their social surroundings (Downey & Feldman, 1996). A developing

body of literature gives experimental support to the RS model as used to peer connections between children (London et al., 2007) and adults' romantic relationships (Downey et al., 1998a; Harper et al., 2006).

In the RS paradigm, earlier rejection experience is assumed to lead individuals to shape or develop insecure working models of connections that established the way people illustrate also act in their resulting association. The paradigm of rejection sensitivity alludes to people's increased consciousness of their impression of conceivable rejection. Romero-Canyas et al. (2010) portrayed three elements of this consciousness. First, the individual is on the constant control for indications of SR and has an elevated carefulness or caution for indexes of rejection. Second, the individual can identify contrasts between rejection cues and different sorts of signs that occur in his or her social surroundings. Third, a high rejection sensitive individual's susceptibility happens as a susceptible response to rejection, wherever the individual can activate his or her protective assets rapidly and react commandingly through animosity or antagonistic behavior (Weeks, 2011).

Early forms of rejection by caregivers and other essential social supporters set into motion of an inflexible, intrapersonal dynamic that may reflect itself in future social situations as an expanded reactivity to rejection, isolation, and interpersonal difficulties (London et al., 2007). Such experiences drive persons to anxiously expect rejection in social interactions (Sun et al., 2014). Subsequently, they put a high incentive on evading rejection. In particular, Bowlby emphasized that interior working models come from early experiences and eventually biased information processing. If an individual regularly encounters rejection, she or he will generally predict rejection in new circumstances. Since repudiation is an unpleasant experience, the impulse to

avert rejection will become distinctly striking and this deep-seated or unending motivation will predispose processing with the objective of distinguishing and staying away from rejection experiences (Feldman & Downey, 1994).

### 2.2.1 **Rejection sensitivity theory and theoretical framework**

In the 1990s the theory emerged proposing that sensitivity to rejection in childhood is an association between experiences of rejection by others and/or low acceptance. Downey and colleagues drew their theory from Bowlby's attachment theory (1969) in combination with Michel's cognitive social learning perspective (1973) in an ecological framework and suggested that RS is internalized from past rejection experiences by others (Levy, Ayduk, & Downey, 2001). In addition, utilizing a social cognitive framework, RS was depicted as one procedure that results from early experiences and influences the processing of social information in the present and future situations. Thus, sensitivity to rejection is portrayed as a process that intercedes the connection between early relational experiences and reactions to present situations (Feldman & Downey, 1994). There is one common postulation between these two theories which is that when the need for belonging (or the interpersonal value) remains enduringly unfulfilled; an individual suffers from various negative consequences (Sanyal et al., 2016).

Conceptually, Downey and Feldman portray RS analogous to Bowlby's working models; however, they focused further on how rejection sensitivity disposes of cognitive and effective procedures that produce behavior in particular social stances, especially regarding interpersonal connections. Pietrzak, Downey, and Ayduk (2005) declare that rejection sensitivity might be perceived as a blueprint for some of the key cognitive and affective sub-processes integrated with individuals' working model of



attachment. In this way, RS is more particular and accurate than insecure working models. In particular, despite the fact that attachment concentrates on internalizing impressions, RS is centralized on the evaluation of the environment, behaviors and others' intentions, and in addition to people's reaction strategies. Subsequently, RS is probably a proximal predictor of connection behavior in intimate connections. If the caregivers reject children's needs, child's rejection sensitivity will increase (Feldman & Downey, 1994).

Consequently, early rejection experience could lead a child to evolve an unreliable or disordered attachment style, which may incline them towards being sensitive to rejection in their future interactions. The rejection sensitivity speculations diverge from hostile attribution theory in that they conceptualize the cognitive procedures implied in aggression behavior to some degree in a different way. Instead of deriving from an inclination to anticipate that others will behave aggressively towards them, the theory proposes that hostile children anticipate that others dislike, eliminate or discard them, and are more probable than their non-aggressive peers to understand others' conduct as rejection. The RS theory is compatible with Dodge's (1991) assumption that the experience of the absence of closeness in early parent-child connections might be particularly characteristic of the RA profile. In fact, while an absence of closeness with caregivers could lead a child to experience guardians as hostile, it could similarly lead a child to experience caregivers as rejecting (Reilly, 2007).

RS theory also indicated that encountering repudiation with friends or peers can result in rejection sensitivity (Downey & Feldman, 1996), furthermore, in this manner it is conceivable that being accepted by at least one intimate friend might

likewise start to modify the anticipations of rejection and emotions. Friendship supportiveness has been found to modify the relationship between RS and depression indications in early adolescence and illustrated the extent that RS highly corresponded with depression symptoms arising from low levels of friendship supportiveness rather than a moderate and high level of supportiveness (Bowker, Thomas, Norman, & Spencer, 2011). Social support and peer acceptance could abolish the impacts of SR. Similarly, having few friends and low social support could leave a person especially susceptible, and therefore more inclined to experience interpersonal rejection sensitivity (Butler, Doherty, & Potter, 2007). In spite of the evident connection between anxious RE and maladaptive results, nevertheless, there is motivation to believe that not everyone who fears and anticipates rejection encounters personal and interpersonal obstacles to a similar degree (Freitas & Downey, 1998).

The theory of RS contends that first, the "sensitivity" alludes to three aspects (a) an uplifted consciousness and cautiousness to SR signs, (b) capacity to distinctively recognize rejection signals, and (c) a susceptible protective response to rejection signs (Romero-Canyas et al., 2010a). The second controversy somehow interferes with the detection ability hypothesis in the "stage of coping theory" (Weeks et al., 2009), although the two perspectives expect the various outcomes, the HRS trait anticipates more psychological problems, including depression, aggression (Ayduk, Downey, Testa, Yen, & Shoda, 1999; Downey et al., 1998a; Romero-Canyas et al., 2010a), relationship breakdown, loneliness, and dating violence (Ayduk, Downey, & Kim, 2001; Downey et al., 2000; Levy et al., 2001).

The hypothesis of RS theory regarding why HRS people keep on pursuing connections fraught with potential rejection, referenced Horney (1937), who implied

that individuals with high sensitivity to rejection comprehend connections as a chance for acceptance. This would propose that exceedingly RS individuals are at first exceptionally advertent and circumspect. Others are probably going to react positively to these behaviors, which encourage the individual's belief that this relationship will be the one so firmly wanted. Whereas, once the inescapable flaws are shown, for example, negative temperament, insensitivity, and decreased fervor, the RS individual is probably going to encounter these ordinary or common events as indications of imminent rejection (Downey & Feldman, 1996).

More particularly, they distinguished the history of parent and peer rejection and the integration of both as the possible harbinger to RS. At the point when this is taken into account, within a social perspective, it is anticipated that sensitivity to rejection formulates coding techniques, self-regulation, expectancies, and values arrangements that people convey to new circumstances (McLachlan et al., 2010). Feldman and Downey (1994) expressed that early experiences of repudiation shape how people code anticipate, estimate new social stances, and decide how to respond to them. As per people with a prolonged rejection history effectively see SR signs and predict they will be frequently rejected. People either obviate from circumstances in which rejection is conceivable or seriously look for confirmation that they will not be rejected (again). Particularly, RS was portrayed as the cognitive-affective processing system (CAPS) readiness to tensely anticipate, promptly see, and strongly respond to repudiation (Downey & Feldman, 1996).

In spite of the fact that this conceptualization of RS is obviously pertinent to the concept of attachment, the definition, and operations of rejection sensitivity is more specific and accurate (Downey et al., 1998b; Feldman & Downey, 1994). Therefore,

the RS model is proportionate with endeavors in social cognition during the previous decade to create the content, structure, association, and dynamics of interior working models that can be tested accurately (Ayduk et al., 2000). The RS model particularly posits anxious rejection expectancies which mediate the connections between the features of the situation and the psychological procedures functioning in personal connections (Feldman & Downey, 1994; Mischel & Shoda, 1995).

After five years, Leary (2001) updated RS, in which he conceptualized acceptance and rejection over a continuum of relational measurement. Relational measurement is the amount another person regards his or her association with a partner as significant, vital, or closes (Barrientos, 2007). Exactly when seen relational assessment exceeds a minimum criterion, people feel accepted. Nevertheless, when understood relational assessment falls beneath that criterion, they experience rejection. This conceptualization clarifies those events or cases in which individuals feel dismissed regardless of likewise understanding that they are loved, esteemed, and accepted. Rejection represents the comprehension that a partner's relational evaluation is lower than what one longs, and it is a personal, rather than a dyadic, phenomenon. Showing that rejection is a general event or occasion that occurs in each interpersonal relationship, the imposing of the subjective rejection experience, so far, depends on individual differentiation. These differences are a result of individuals' insights about their connections and, all the more especially, in their inclination to understand rebuff and in the imagined or minor insensitivity of others (Feldman & Downey, 1994).

Furthermore, the RS theory proposes that rejection sensitivity is enhanced by frequent antagonistic behavior, rejection, and careless experiences with important people, involving parents, friends, romance, and partners. For instance, it could be

missing an invitation to a friend's party, rejection of a job opportunity, ending of a sentimental relationship, or aversion of an outsider to converse with you. Everything drives essentially to negative emotions like distress or outrage and how people account for these negative experiences as well as further adapt to them count on differing intra and interpersonal variables (Rosenbach, 2014). Over the past two decades, various researchers have recorded considerable relationships amongst RS and various psychological difficulties through adulthood including anxiety and depression (e.g., Ayduk et al., 2001; McCarty, Vander Stoep, & McCauley, 2007). These outcomes distinctly point out that RS is a significant cognitive-affective risk factor for psychological maladaptation (Bowker et al., 2011). RS is also considered a robust predictor of such relationship problems as poor relationship satisfaction and insecurity (Downey et al., 1998a; Purdie & Downey, 2000).

Detecting SR signs sensitively is thought to be beneficial in dealing with SR and averting more SR permits the individual to retrieve social relationships (Wesselmann et al., 2012). Despite the fact that the contentions elevated carefulness and defensive response to signs of SR have been bolstered by an abundance of proof (Dickerson & Kemeny, 2004; Downey et al., 1999; Downey et al., 1998a; Romero-Canyas & Downey, 2005), direct confirmation or proof of the correlation between attribute RS and the capacity to reveal social repudiation signals is still restricted (Kawamoto et al., 2015). Along these lines, rejection sensitivity alludes to a feature that makes a few people slightly different from others. Rejection-sensitive individuals come into new situations feeling anxious and expecting rejection. Those who are high rejection-sensitive, likewise see rejection in situations more frequently than others, tending to perceive rejection in others' actions and words (Psychological Research and Reference, 2016). Thus, high rejection-sensitive people are extremely concerned and

anxious about desertion and rejection expectancies, while low rejection sensitive people moderately predict acceptance and are unworried about rejection (Ayduk et al., 2000). The impact of attachment theory and social cognitive learning theory is discussed as follows.

#### **2.2.1.1 The effect of attachment theory**

Attachment theory influences the RS theory due to the idea that individuals evoke their anticipation from their previous relationships and reflect them in their future connections (Downey et al., 1999). As suggested by Bowlby, a person's expectancies of connections originate primarily from early childhood relationships with their caregivers (Bowlby, 1969, 1973, 1980). The secure attachment working model as Bowlby depicted could form when children regularly fulfilled their needs in the early stages of their lives, so that they go on to create solid connections and predict that others will prop and accept them in future connections. At the point when children's needs are refused, the healthful pattern is not created which results in the child being frightened and dubious when looking for others' support and acceptance (Bowlby, 1973).

Some children will be plainly "anxious-avoidant" and avert communication with their parents completely, while a few will completely embrace an "anxious-hesitant" technique and behave aggressively with their parents. This, consolidated by frequent requests of reaffirmation, as well as an obvious absence of a consistent strategy and conflicting behaviors is expounded as a muddled attachment style as portrayed by Bowlby (1973). In spite of the fact that Bowlby's theory essentially concentrated on a child's attachments with parents, Bowlby proposed that attachments portray the experience of human beings over a long period of time (Fralely, 2004). A

huge number of studies originating from the original attachment theory concentrate on attachment in adolescence, especially with regards to romantic connections. According to Hazan and Shaver (1987) in romantic connections the emotional relationships that develop among adults are equivalent to the attachment framework showed amongst children and caregivers (Hazan & Shaver, 1987).

Moreover, it has been recognized that similar variations in the dynamic of the relationship between the infants and their caregivers could be exhibited in their relationship with their spouses in the future. For instance, a few adults have secure relationships and also are assured that their partner is dependable and considerate. In contrast, those with insecure relationships exhibit avoidant attachment styles, concern about being disliked, and evade becoming dependent on their partners (Fraley, 2004). These procedures seem to be by all accounts, broadly developed in the sensitivity to rejection model, and negative results of utilizing the previously mentioned uncertain techniques are identified (Downey et al., 1999).

The infant's first relationship, the one with the mother, acts as a template as it forever influences the individual's abilities to develop later romantic connections. These early experiences form the development of unique personality, its adjusted abilities and its susceptibility to and resistance against specific types of future pathologies. Main (1990) pointed out that an avoidant child's strategy is comprehended as limiting the expression of negative feelings, with respect to what might be predicted, when relating to the parent who is comprehended to have been previously dismissive or disregarding of the child's attachment-related conduct. This strategy includes directing attention far from the predicted rejection by the parent, and re-concentrating on the environmental features (Olsson et al., 2013).

### **2.2.1.2 The effect of social cognitive learning theory**

The contribution of the social cognitive learning perspective is that it underlines the communication between the moment-to-moment procedures that affect behavior in specific circumstances (Feldman & Downey, 1994). In addition to this perspective, RS paradigm views early experience of repudiation and procedures to adapt to such rejection as blueprints. People's lives are sorted based on these "scheme learning structures" which influence how people see, account for, as well as remember this information. Once a scheme is shaped, subsequent associations are held up to these primary thoughts. Interestingly, these patterns permanently adjust and change according to people's experiences (Downey et al., 1999). The components of social cognitive learning theory and attachment theory work as a cornerstone of RS paradigm (Downey et al., 2004). In short, the influence of both theories exists in that people convey expectancies from one relationship to consequent connections according to attachment theory, whereas, the social cognitive approach presents the idea of rejection as a scheme that becomes a deep-rooted readiness in an individual's life.

### **2.2.1.3 Conceptualizing rejection sensitivity as a cognitive-affective processing disposition**

Downey and Feldman (1996) in their study have theorized the psychological legacy of early rejection in cognitive-affective processing terms. In particular, they have tried to understand how early experiences of rejection form (a) the predictions, fears, biased interpretations, values, and self-regulatory techniques underlying behavior in specific relational settings and (b) the dynamic connections between these cognitive-affective factors and interpersonal behavior (Downey, Feldman, Khuri, & Friedman, 1994; Feldman & Downey, 1994). That is why people develop the expectancy to likely be rejected when they look for support and acceptance



from important others, as well as determine how to put a specific high value on evading rejection (Downey & Feldman, 1996). They were inspired by a rich theoretical tradition to suggest that early experiences of repudiation leave a psychological legacy that develops the readiness to be RS by their valued people. They have already found that childhood exposure to rejection and family violence is related to increased susceptibility to rejection, which supports their assumptions (Feldman & Downey, 1994).

These anxious rejection expectations make people hypervigilant for indications of repudiation. When they experience rejection hints, even though insignificant or vague, they are inclined to understand willful rejection and encounter feelings of rejection. The comprehended rejection is then liable to provoke both behavioral and affective overreactions (Feldman & Downey, 1994). Inclusive anger responses showed an obvious verbal, and nonverbal aggression, physical, hostile, and similarly anxious responses showed in self-silencing, passive hostility, social withdrawal (Ayduk et al., 1999; Ayduk et al., 2000). In addition, “relationship dissatisfaction, depressive symptomatology jealousy, violence” (Christman, 2012, p. 1), sometimes remote and acquiescent behavior which results in turbulent and frequently fleeting connections (Downey et al., 1998a; Romero-Canyas et al., 2010a) with feeling bothered or woeful. Such responses may influence interpersonal functioning and individual prosperity (Baumeister & Leary, 1995). Additionally, sensitivity to rejection represents a wide scope of distress, and some of people’s experiences in response to vague and possibly SR situations and interpersonal interactions (Slimowicz, 2011).

#### **2.2.1.4 Conceptualizing RS as a defensive motivational system**

In psychiatry and clinical psychology, the phenomenon of rejection has a long descriptive history and is related to numerous personality readiness including

insecure attachment style, low self-esteem, social anxiety, and neuroticism. The model of RS has been built up by Downey and her colleagues to explain the phenomenon in social-cognitive terms as the readiness to anxiously predict, promptly see and seriously respond to rejection. The RS model implies that earlier exposure to the distress of rejection (Downey et al., 1997), probably in synchronism with a biological susceptibility, drives people to become sensitive to the likelihood of future rejection by important others and encourage them to save themselves from it (Downey et al., 1998a).

In support of the conceptualization of rejection susceptibility, the defensive rejection anticipation plays a role in encouraging the status of predisposition to realize and overreact to rejection. Additionally, rejection vulnerability prompts youthful adults to continue in ways that undermine their cozy or close connections (Downey et al., 1998a). They characterized RS as per the general approach evasion motivational model that recognizes two influential motivational systems; an approach framework reacts to affirmative motive, while an evasion/defensive system is sensitive to negative stimulus and leads when activated to a favored perception and handling of possible threatening hints (Cacioppo, 1999; Lang, Bradley, & Cuthbert, 1990). It was suggested that this defensive motivational system was especially susceptible to SR in persons who are high in rejection sensitivity. Empirical researches bolster this assumption by utilizing the startle reflex, which is regarded to be a dependable marker of the activation level of the defensive motivational system (Lang et al., 1990).

The perspective of Downey, Freitas, Michaelis, and Khouri, (1998) is that the rejection sensitivity dynamic works to protect the persons against rebuff by their important people and social groups. To the degree that the person has encountered the

distress of rejection, saving the person from rejection while keeping up intimate connections will turn into an essential objective, and a self-defensive system, for example, sensitivity to rejection will evolve to attend it. Nonetheless, this system becomes distinctly useless to the degree that it is evoked automatically with slightest rebuff signs and starts particular activities that eventually result in the accomplishment of the prediction of rejection (Downey et al., 2004). The idea of rejection sensitivity was expanded via proposing a 'motivational system' as a basic physiological technique, which empowers a productive approach to distinguish and respond to a possible impotence of belonging (Downey et al., 2004; Pietrzak et al., 2005).

Regardless of its intentional work, rejection sensitivity normally has maladaptive outcomes, in which the self-defensive behaviors boost eventually both undermines the connections that individuals make and hinders the forming of important relationships, evoking more feelings of rejection (Downey et al., 1998a). There is extensive confirmation to bolster the idea that RS adds to this self-long-lasting cycle of interpersonal difficulties and adversity by driving people to process information in ways that prioritize spotting and readily reacting to impotence of rejection namely, through activation of the DMS. When checking pictures conveying rejection, rejection sensitivity expectant, individuals displayed elevated startle reactions (Downey et al., 2004), illustrating an increased activation of the physiological system to get ready to be defensive against the threat (Lang et al., 1990).

Besides the high level of predisposition for physiological impotence reactions, those high in rejection sensitivity additionally have a prior existence of anticipation of RS that is promptly activated and used to understand social interaction signs in the present situation (Downey et al., 1998a). For instance, Romero-Canyas,

Downey, Franco, and Bolger (2008) indicated that individuals high in RS account for short video clips of others' natural passionate reactions as expressing more interpersonal negativity, than positivity (Berenson et al., 2009). However, the procedures that serve early disclosure and handling of possible rejection threats in rejection sensitivity, people are probably going to incorporate defensively motivated attention deployment (Berenson et al., 2009). Downey et al. (2004) conceptualize rejection sensitivity, in circumstances wherein rejection is a probability (e.g., meeting a potential dating partner, requesting someone's friend does a favor), individuals who are high in rejection sensitivity are unsure about whether others will accept or reject them; however, the result is crucial (Downey et al., 2004). Consequentially, for high-rejection sensitive people, such situations include the cognitive evaluation of risk under states of doubt when in particular situations known to stimulate the defensive motivational system (Fanselow, 1994; Lang, Davis, & Ohman, 2000; Lazarus, 1999; Metcalfe & Mischel, 1999).

LRS people have a low potentiality to encounter increased defensive motivational system activation in these same conditions since they commonly consider rejection less likely and are less anxious. When the defensive motivational system is stimulated, it encourages observation and detection of threat-relevant hints and readies the person for quick reaction once signals of risk are detected. Downey et al., (2004) assumed that in rejection-relevant conditions, this system is automatically activated in HRS people. Hypothesizing that rejection sensitivity developed particularly to defend the self against rejection, they assumed that the system is biased toward dealing with threats of rejection. They also did not anticipate that acceptance would evoke the appetitive system in high-rejection sensitive individuals to a greater extent than in low-rejection sensitive people. Therefore, rejection sensitivity ought to expect hints of

elevated DMS activation within the existence of rejection yet ought not to anticipate increased activation of the appetitive system within the existence of acceptance signals. The human startle probe paradigm was utilized to examine these expectations (Downey et al., 2004).

In summary, Downey and Feldman (1996) have relied on attachment theory and social cognitive theory in conceptualizing RS. They took the idea that people transfer their experiences from their past relationships and reflect them on their future connections from attachment theory; whereas, they took the idea of rejection sensitivity as a scheme that becomes an inveterate readiness in a person from social cognitive learning theory. According to rejection sensitivity theory, some people are sensitive to rejection due to their early rejection experiences by significant people in their life; in addition, those who are highly susceptible to rejection are inclined to anxiously expect rejection by others. This theory also has indicated that early experiences of rejection influence people's future relationships because it affects the way that people perceive relationships with others. Also, those who are rejected by their caregivers and close people pursue relationships looking for others' support and acceptance. Rejection sensitive people become vulnerable to the indications of rejection even in insignificant or ambiguous situations, the comprehended rejection then triggers their behavioral and affective overreactions. Rejection sensitivity theory focuses on the encoding, expectations, and self-regulatory abilities that enhance people's reactions to rejection signs. Downey and Feldman began with conceptualizing rejection sensitivity in cognitive processing terms then they expanded the construct to include the motivational system that helps people to detect and respond immediately to any possible SR threats in order to defend themselves. Rejection

sensitivity theory focuses on rejection by an intimate partner; however, rejection by parents or by peers is not discussed in this theory.

#### **2.2.1.5 Theoretical framework of rejection sensitivity**

In the beginning, the model of RS was developed to outline how the message of dismissal by valued people forms people's behaviors, opinions, and feelings toward close people or different social objectives in social situations. These feelings and thoughts have direct consequences for interpersonal as well as personal adjustment. The model (see figure 2.1) suggests that, to the degree that a person encounters refusal throughout their developmental years, they develop the anxious expectations that others will reject them. Individuals figure out how to connect rejection with specific situations and signs. Thus, these signs perform as a provocation that stimulates the anxious anticipation of rejection (Pietrzak et al., 2005). RS individuals are considered to be particularly responsive to social threat signs and to have a lower threshold for responding to them, leading to further extreme emotional responses. This responsive inclination is believed to lead to additional obvious expressions of overt hostility and anger, in turn generating a possibility for a feedback loop that becomes a self-fulfilling (Romero-Canyas et al., 2010a).

The theory of RS proposes that expectancies of rejection interact with the specifics of the situation (Freitas & Downey, 1998; Mischel & Ayduk, 2002). Downey and her colleagues have indicated that experiencing rejection during childhood can prompt later RS (Feldman & Downey, 1994). The model proposes that these people may engage in relationships with a tendency to predict rejection from valued others. Amid distressing circumstances, they are particularly liable to first, perceive rejection by the partners insensitive or vague behavior, second, have insecure feelings about the

relationship, and finally, react to comprehended rejection with aggression, lessened support, or jealous, controlling conduct (Downey & Feldman, 1996). At the point when such reactions are unjustified and overstated, they are probably going to corrode even a loyal partner's contentment with the relationship (Hurley, Field, & Bendell-Estoff, 2012).

Early and long experience of rejection results in the readiness to anticipate rejection rather than implying in social relations. Downey, Khouri, and Feldman (1997) assumed that rejection of essential needs and parental mistreatment lead to the persisting supposition that rejection would occur repeatedly. At the point when a trigger stimulant shows up in situations (e.g., two individuals were talking to each other, but they become silent when a person gets closer), the person understands being rejected even in vague situations. The conception of rejection stimulates cognitive (e.g., self-blaming) and effective responses (e.g., feeling sad or furious), which thus evoke withdrawal, hostility, or acquiescence. These improper responses to comprehend rejection can, therefore, involve real rejection by others as far as a self-fulfilling prediction (Rosenbach, 2014). RS model expects that individuals will often show other reactions to rejection. For instance, partner-initiated breakups provoke depression among younger women who are high in RS, while reciprocally instigated breakups do not. Additionally, depending on timing and the magnitude of the rejection, people high in RS often react to rejection with effortful attempts to save the relationship. Nevertheless, the preliminary reaction to rejection indications is one very expected to include reactive aggression and anger (Romero-Canyas et al., 2010a).

The specification of the RS model has been modified by Downey, Mougios, Ayduk, London, and Shoda (2004) as a protectively motivated system. A defensive motivational system (DMS) is stimulated when the negatively categorized stimulus is

confronted. Then it prepares the person for involuntarily carried out behaviors with the objective to save the self (fight-or-flight reactions). As for RS, the DMS assist HRS people to rapidly identify rejection cues in social circumstances evaluate and respond towards it in order to protect themselves from rejection. Despite the fact that the RS model includes nature, etiology, and results of RS, it has become accepted that the anxious expectancy of rejection alone is named RS (Downey et al., 2004). Though the given meaning of RS portrays accurately what is implied with the construct, there is an incredible reciprocity in the utilization of terms to concentrate on worries about negative social assessment, e.g., shyness, social anxiety, and interpersonal susceptibility (Downey et al., 2004). The long-term response, according to Smart Richman and Leary (2009), is specified by how one estimates the rejection (e.g., how valuable is the relationship, possible alternatives, current mood and self-esteem, extent and sternness of rejection, as well as perceived costs).



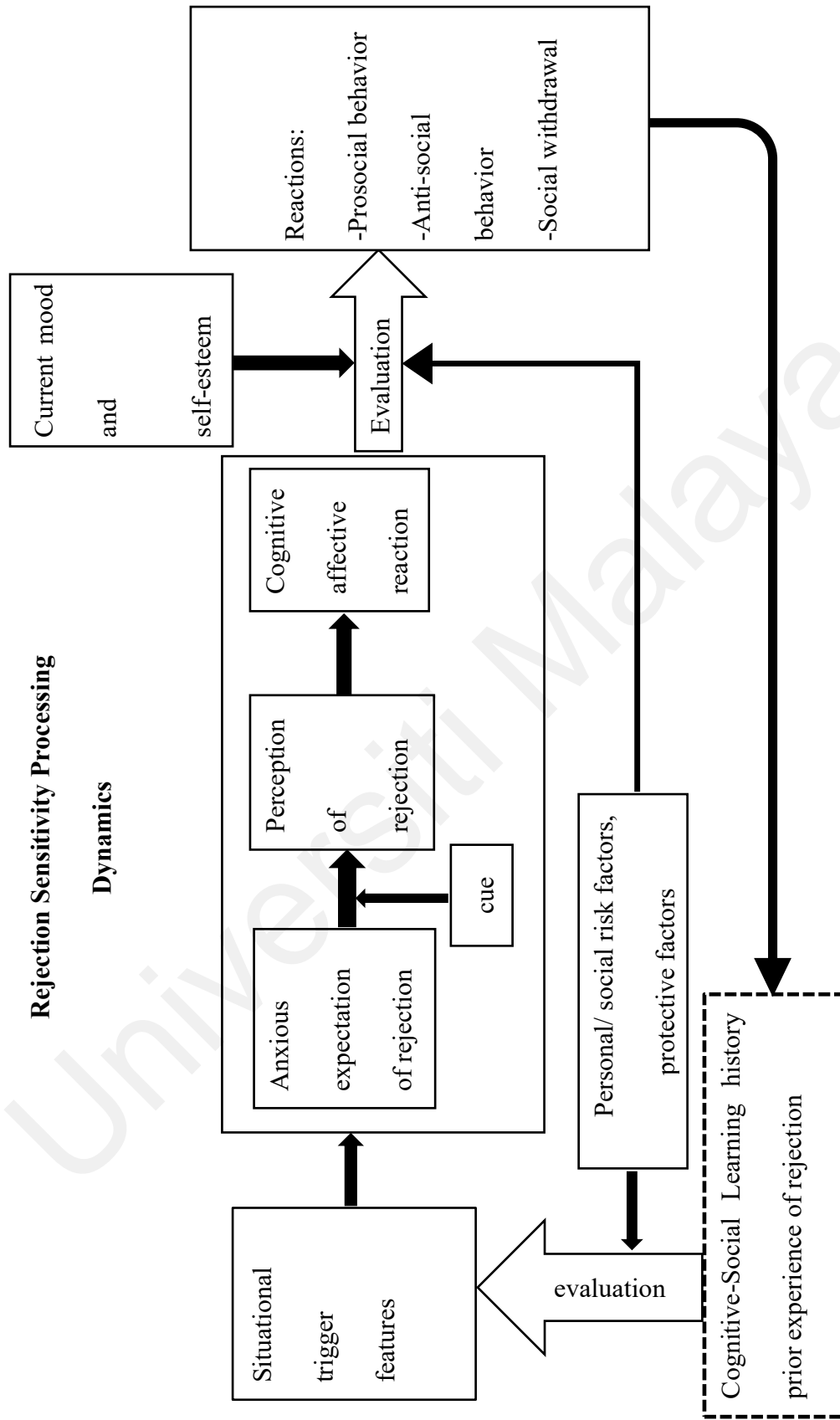


Figure 2.1. Rejection sensitivity theoretical framework adapted from (Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010a; Rosenbach & Renneberg, 2011)

### 2.2.2 Trait rejection sensitivity

Rejection sensitivity is developed with regards to early rejection experiences and the absence of sufficient connections with people. Such early experiences may prompt a propensity to develop anxious predictions of rejection, driving people to act defensively. Additionally, effective theories have proposed the relationship between the motivational defensive reaction to signals of SR and the perpetual SR experience. For instance, according to Williams (2009), the stage of coping theory proposes that long-lasting ostracism might drive individuals to an acquiescence phase, which leads to withdrawal behaviors and evasion. Moreover, the optimal calibration theory additionally underlines the essential part of incessant experiences of RS on the social repudiation processing boosts (Chester, Pond, Richman, & Dewall, 2012). Chester et al. (2012) utilized a life history framework and they recommended that early life experience of constant SR could transfer the neural processing of SR to be defensive and introvert. In this way, an abundance of evidence and theoretical frameworks upheld the connection amongst defensive reactions and rejection sensitivity (Kawamoto et al., 2015).

Some evidence shows that individuals who have HRS have reinforced capacity to distinctively recognize as well as increased attentiveness to RS hints. For instance, HRS individuals are greatly concerned or distress in their reacting to vague SR (Downey et al., 1998b) as well as in their reaction to their spouses they convey higher conflictual appraisals (Norona, Salvatore, Welsh, & Darling, 2014). Psychological reactions to social risk hint additionally give proof with respect to the distinctive detection, and elevated caution for SR signals (Olsson et al., 2013). People with high sensitivity to rejection also consequently anticipate being dismissed by others, comprehend rebuff even in safe social interactions and incline toward overstated

reaction manner (e.g., extravagant efforts to gain attentiveness, social withdrawal, or antagonistic, aggressive conduct). Rejection sensitiveness in this manner alludes to three procedures (a) the anticipation, (b) understanding of social refusal and (c) the reaction to rejection. In the model of RS, Downey and her colleagues in 2004 presumed that the predisposition anticipation of rejection is related to excessive vigilance for motivation that might indicate rejection, which thusly brings about bad cognitive responses such as self-blame and effective responses (harm, fury). High RS is accordingly a component that intimidates the combination of the group. Frailty, hostile behavior, and withdrawal from social situations in social situations are basic behavioral associations of high rejection sensitivity (Rosenbach & Renneberg, 2011).

The fear of rejection might be felt consequently and deeply, counting on the attributes of the person. Moreover, the interpersonal interactions of persons who are especially susceptible to rejection include feelings, for example, insecurity, inconvenience, and incorrect interpretation of social hints, where these individuals tend to be puffed up to show behaviors which in the long run result in their rejection by other individuals (Luterek, Harb, Heimberg, & Marx, 2004; Zimmer-Gembeck, Trevaskis, Nesdale, & Downey, 2014). Anxious anticipation of rejection leads to hypervigilance and checking the environment for indications of rejection. Insignificant or obscure cues are deciphered as rejection signals and rejection susceptible people instantly comprehend them as intentional or deliberate (Downey & Feldman, 1996). Erozkhan (2004) denoted that perceived refusal cues effective and behavioral excessive reactions which involve anger, withdrawal of support, antagonistic, jealousy, dejection, and improper endeavors to dominate the conduct of important others (Erozkhan, 2009; Natarajan et al., 2011).

### 2.2.3 Responses to rejection sensitivity

The comprehension of rejection in practice results in romantic distress affective and behavioral reactions to understand rebuff which involves anger, animosity, jealousy, hurt emotions, distress, isolation, guilt, embarrassment, social anxiety, romantic withdrawal, and depression (Downey & Feldman, 1996). Sometimes individuals feel encouraged to react to rejection in pro-social aspects trying to reestablish acknowledgment, raise their relational value, and control the experience of negative effect. Nevertheless, since many anger-producing stances include feeling rejected, reactions to rejection are not generally pro-social (Mabel, 1994). People are more disposed to behave aggressively when rejection triggers anger, which, unexpectedly, decreases their chances of acceptance and keeps up negative feelings. Generally, aggressive individuals feel more rejected and self-reported motivations for aggressive behavior repeatedly include the view of rejection (Leary, Twenge, & Quinlivan, 2006).

Individuals differ extremely, though; to the extent, they recognize hints of social impotence as a personal threat as well as the way they react to these threats, with a comprehensive sense of their social performance and prosperity (Olsson et al., 2013). There is extensive proof connecting RS with a number of various relationship obstacles, including responsive antagonistic, over convenience or adaptation to the necessities of others, and evasion of situations that involves a danger of rejection or critique. The rejection sensitivity works as a self-fulfilling prediction with restless anticipation of rejection inspiring a predisposition to comprehend and respond to it in ways that evoke the fear of rejection, as well as affirmation to boosts to anticipations of rejection (Downey et al., 1998a).

These different maladaptive interpersonal forms such as being predisposed to develop aggressive, hostile, socially withdrawn or excessive-accommodating are caused by the anxiety about the potentiality of rejection (Berenson et al., 2009; Purdie & Downey, 2000). As well, these maladaptive forms can prompt anxiety, depression, loneliness (Ayduk et al., 2000; McDougall, Hymel, Vaillancourt, & Mercer, 2001), low self-esteem, disturbance of interpersonal working, decrease of one's capacity to adapt to social interactions (Ayduk et al., 2000; Butler et al., 2007; Harb, Heimberg, Fresco, Schneier, & Liebowitz, 2002) and also violence in romantic connections (Downey et al., 2000). Vulnerability to rejection and distinctive patterns of responding to perceivable rebuff are likewise part of some psychiatric diagnoses characterizing standards, such as social anxiety, BPD and avoidant personality disorder (Khoshkam et al., 2012). In Addition, people with borderline personality disorder or social anxiety disorder are highly vulnerable to negative evaluation and to social rejection. RS is also an atypical symptom of major depressive disorder (Gao et al., 2017).

The power of one's reactions to rejection relies on the perception of how much the coveted partner sees the relationship as precious and critical. The minimal criterion needed to feel relationally esteemed differs according to those included in the relationship; some need to feel more socially esteemed than others do. Kelly (2001) indicated that responses to rejection must consider how much individuals long for others to esteem having relationships with them. Due to this, a similar negative interpersonal event can evoke fluctuating responses from individuals. Despite the fact that, one negative event can lead individuals to view a similar level of low social or relational assessment, they do not necessarily need to react similarly. If being socially esteemed by the offending individual is not critical, the individual is probably going to have a weak response to the dismissing events. However, a person who longs to be

valued by the offender would have a stronger response (Kelly, 2001). Leary (2001) suggested that rejection from significant others triggers more robust responses than similar repudiation from acquaintances and outsiders. This is because of the strongest feeling of rejections are produced from events that infer relational depreciation. Depreciation infers to the relational understanding that one's social esteem has decreased with respect to some prior time. As previously discussed, this clarifies why a person can feel dismissed despite the fact that he or she additionally believes that his or her partner still acknowledges him or her in some way or another. Responses to devaluation change intensity as per relational attributes, particularly closeness (Leary, Haupt, Strausser, & Chokel, 1998; Miller, 1997).

Buckley et al. (2004) found that contrasted with accepted participants, the individuals who were rejected show an increased desire to act forcefully rather than pro-socially (Buckley, Winkel, & Leary, 2004). Leary et al. (1998) found that those in the increasingly rejecting situation show more outrage than participants in any other groups. These participants additionally revealed feeling the least esteemed and acknowledged. Likewise, Leary et al. (2006) pointed out associations between the comprehension of rebuff, feeling of anger, and forceful conduct. Of course, the comprehension that another did not satisfactorily esteem their connection with the participants extracted hurt emotions. Those with hurt emotions show heightened anger, and 80% of them revealed expressing their anger to the offending party. Of those, 62% revealed that they reacted to the individual with a verbally forceful message with the aim of being critical or unpleasant (Leary et al., 2006). Downey et al. (1999) expanded their distinctive RS hypothesis to include angry rejection sensitivity and anxious rejection sensitivity that mainly concentrated on the anxious anticipation of rejection. They suggested that expectations of rejection are joined by protectively oriented

feelings of anger (e.g., furious desires) or anxiety (e.g., on edge desires) (Zimmer-Gembeck & Nesdale, 2013).

#### 2.2.4 Causes of rejection sensitivity

As Sroufe (1990) contended, RS is a result of individuals' biological structure and social history. Throughout the years of childhood and the development, encountering rejection by family, friends, peers, instructors, or some other effective individuals might produce an anxious anticipation that will be felt again in interaction with other similar individuals significantly later on as well as affect their comprehension and anticipation for all future communication history (Sreehari & Natarajan, 2014). Romero-Canyas et al. (2010) demonstrate that individuals figure out how to connect rejection with definite circumstances and signs that then act as prompts that trigger the anxious anticipation of rejection. A few experiences that might develop RS in people include the experience of family aggression, emotional disregard, cruel punishment, and restrictive love by guardians (Downey et al., 1999; Harper et al., 2006). Other studies additionally support the hypothesis that controlling parenting practices heightened levels of susceptibility to rejection in children (Baumrind, 1991; Downey & Feldman, 1996; Erozkhan, 2009). Feldman and Downey (1994) have proposed that rejection anticipations would subsequently be shaped following frequent rejections by important others.

The styles of attachment that are developed in childhood seem to be comparatively steady into adulthood and are represented in emotional patterns related to romantic relationships, responses to repudiation and other interpersonal difficulties for the duration of one's life (Brennan & Shaver, 1995). Additionally, individual variations in reactions to perceived rejection were highlighted by the attachment

approach (Feeney, 2005). The forming of rejection anticipations at whatever time in the formative course may likewise be caused by experiences of rejection from individuals other than essential caregivers. Early peer rejection through bullying, teasing or being lonely repeatedly has been connected to later maladjustment. It was reported that RS intercedes the association between rejection by peers and repeated behavior (Downey et al., 1998b). Once a child frequently encounters rejection, all intimate interpersonal conditions, later on, may function as primes for rejection since there is a robust mental relationship among close interpersonal signs and experiences of rejection, which results in the development of anxious anticipation of rebuff (Feldman & Downey, 1994). These anticipations according to Olson et al. (1996) can influence the way the social information will be processed in future life as the attributions and perceptions of individuals are driven in a top-down handling manner by the expectations in which individuals enter an interaction (Sreehari & Natarajan, 2014).

Rejection anxious expectations are accordingly conveyed from one relationship to another and can shape a steady type of interaction with a future partner. RA might be particularly circumstantial and that individual may figure out how to anticipate rejection from specific people or groups, however, to expect acceptance from others (Levy et al., 2001). An individual's behavior differs crosswise over circumstances, and this is indicated by the individual's efforts to understand his or her experiences (Weeks, 2011). RS has been conceptualized as a defensive motivational system (DMS) that is activated as a physiological technique to defense environment threats. In circumstances where rebuff is predicted, the defensive motivational system is automatically triggered in HRS individuals when social threats exist. This clarifies the HRS individual's predisposition to perceived rejection in other's behaviors and



their inclination to overly respond to the perceived rejection (Gao et al., 2017). Sreehari and Natarajan (2014) likewise concentrate on neurobiological and intellectual indications of rejection sensitivity. Neurobiological outcomes from fMRI studies demonstrate that individual variations in RS are interceded by distinctive recruitment of brain parts engaged in emotional evaluation and cognitive control when exposed to rejection stimulus.

### **2.2.5 Consequences of rejection sensitivity**

Experimental study on the impacts of HRS has hitherto concentrated on social-psychological problems, especially concerning issues in family and couple relationships, where rejection sensitivity was associated with improper behaviors (Levy et al., 2001; Smart Richman & Leary, 2009). The model of Smart Richman and Leary (2009) integrating with the Downey et al. (1998) model of RS, Rosenbach and Renneberg, (2011) indicated that HRS individuals perceive and respond to rejection with either anxiety, withdrawal from social situations, or averting social stances in the future either with offensive behavior and hostility; or through significant struggles in social conditions. Regardless, there are inevitable results, for example, difficulties in social interactions, real rejection by others, and heightened psychological suffering. As formerly stated, achieving the need for belonging and acknowledgment makes an important contribution to mental health and well-being. Serious emotional disorders that can cause clinically pertinent inverse impacts might result if an individual lacks this satisfaction over a long time period. Therefore, it was hypothesized HRS is one of the pertinent components that can contribute to the immortalization of such disorders and threat the etiology of psychological disorders (Rosenbach & Renneberg, 2011).

When the HRS person is unable to fend off repudiation, he has a tendency to respond with self-directed antagonistic cognitions (Breines & Ayduk, 2015) and the development of depressive symptoms (Breines & Ayduk, 2015; Chango, McElhaney, Allen, Schad, & Marston, 2012). Indeed, even among non-clinical participants, elevated RS is related to a more serious hazard for unfriendly or hostile and aggressive responses (Romero-Canyas et al., 2010a). Moreover, people with high rejection sensitivity take a rejection-related stance or indications personally, acting with utmost hostility and animosity in interpersonal connections, and encountering passive interpersonal connections (Downey & Feldman, 1996). Furthermore, s/he will probably expound mysterious or vague interpersonal signals as signifying rejection, and thusly to encounter more inconvenience, contrasted with individuals with low rejection sensitivity (Burklund, Eisenberger, & Lieberman, 2007).

### 2.2.6 Correlates of rejection sensitivity and past studies

Feldman and Downey (1994) investigated the hypothetical foundations of RS, they found that adults who reflectively revealed childhood aggressiveness were found to be more likely anxiously predict repudiation in adulthood than the individuals who were not exposed to aggression. It was found that susceptible individuals would probably going to account for vague interpersonal circumstances, real or envisioned, as a repudiation and accordingly over-interact to them (Brookingsa, Zembara, & Hochstetlerb, 2003). Studies began to concentrate on psychological distress and psychopathology in people who are highly vulnerable to rejection, according to Rosenbach (2014) based on the primary outcomes on RS and its effect on interpersonal relationships. In many non-clinical (students) subjects, various phases of mental symptomatology were examined. One part of research on RS concentrated on the relationship between atypical depression, bipolar disorder and RS (e.g., Derecho,

Wetzler, McGinn, Sanderson, & Asnis, 1996) meaning that rejection susceptibility affects the people themselves as well as the important people in their lives.

Downey and Feldman (1996) investigated the assumptions that RS enhances problems with close adult connections. The reason for their research was to show the effect of rejection sensitivity on close connections. Their outcomes reported that HRS people revealed higher feelings of rejection than LRS individuals and maybe more vitally, rejection sensitivity surveyed before an emotional relationship started anticipated the degree to which individuals would ascribe a harmful goal to their new romantic partner's insensitive conducts. RS, which speaks to how much an individual predicts, realizes and responds to interpersonal repudiation, has been observed to be related to depression after a partner instigated a separation or break up. Another study indicated that higher levels of parental negligence amid childhood were related to more RS in adulthood (Downey et al., 1997).

People who face a high level of rejection sensitivity regularly report feelings of serious romantic distress (Nezlek et al., 1997) Frequent rejection experiences have been appearing to lead to excessive sensitivity to comprehending and exaggerating their response to rejection stimulus and hints. Moreover, HRS individuals have been found to account for or understand ambiguous signs as repudiation more promptly than LRS people e.g., they understand rejection where there may be no rejection. These expectancies lead to undesirable thoughts (such as self-blame), and negative affective responses (anger, humiliation), which in turn lead to maladaptive behavior (self-silencing, aggression, and social withdrawal) and eventually the rejection of others, thereby undermining significant relationships and mental health. An increased vulnerability to depression after rejection confirms more the predictions of this RS

model's expectations (De Rubeis et al., 2017). Teenagers high in RS are more probable to see indications of rebuff in situations others would deem indifferent or vague than their peers (Downey et al., 1998b). Therefore, RS young people are at risk of responding to perceived repudiation in ways that their peers would consider inappropriate. In research with early teenagers, Downey et al. (1998b) found that the two basic influential responses to possible rejection revealed were anxiety and anger. In this manner, young people with irate anticipations of rejection will probably react with anger and hostility to a comprehended rejection. Youth described as experiencing anxious prediction of rejection will probably underlay the perceived repudiation, feel socially despairing, becoming distinctly dejected, and in the long term retreat from social interaction (Downey et al., 1998b).

In addition, Downey and her colleagues (1996, 1998) found that trait RS is correlated with a negative impression of romantic partners (i.e. seeing the partner as jealous, unfriendly, and emotionally unsupportive) and to the display of more negative conducts, for example, crying, reprimanding, and denying their duty regarding issues in the relationship through talking about their dispute. The facts may confirm that people high in trait RS comprehend struggle with close others as another possible opportunity for repudiation, as opposed to an opportunity to support their relationship or some other tentative obstruction. This negative information concerning strife might be related to RS. Not all the individuals who are high in RS encounter considerable interpersonal distress and unfavorable results.

Ayduk et al. (2000) indicated that positive functioning was correlated with rejection sensitivity, nevertheless, for people with a poor capacity to postpone satisfaction. These results recommend that changeability to the indefinite person's

cognitive attributes helps to clarify some fluctuation in the psychological threats related to rejection sensitivity. They found also that a rejection sensitive individual with efficacious self-regulation aptitudes may feel irate or hurt, yet obviated addressing the comment, expecting that any contention will bring about the end of the relationship (Ayduk et al., 2000). While Purdie and Downey (2000) found that among low revenue, urban youth, high level of RS has been observed to predict isolation and insecurity in the romantic setting and increased misery after rejection by friends (Purdie & Downey, 2000). Ayduk, Downey, and Kim (2001) implied that the message of rejection that the person encounters, and thus of loss, may debilitate an individual's capacity to see him or herself as meriting love and acceptance, which results in a feeling of desperation and discouragement (Ayduk et al., 2001). Parker et al. (2002) stated that RS is a constant style of personality that exists in atypical depression, and demanded an alteration in the description of atypical depression based on a precedence of the RS personality style, depending on investigation indicating RS as the most common symptom of atypical depression (Parker, Mitchell, Wilhelm, Malh, & Hadzi-Pavlovic, 2002).

Furthermore, RS is correlated with a high level of neuroticism (Brookingsa et al., 2003) and problematic internet usage (Davis, 2004). Joyce et al. (2004) denoted those typical people who have depression and are high in rejection susceptibility demonstrated a more diverse antidepressant reaction than people low in RS. RS was also positively correlated with the blink magnitude for negative paintings. These outcomes propose that when high rejection sensitive people perceive a rebuff related stimulus, they indicate elevated DMS activation (Downey et al., 2004). Kross, Egner, Ochsner, Hirsch, and Downey (2007) conducted a fMRI research, which indicated that low level of RS goes along with more action in the left inferior and right dorsal frontal

parts of the brain, regions related to distress control, while regions in charge of emotional handling and cognitive control were not influenced (Kross, Egner, Ochsner, Hirsch, & Downey, 2007).

Tops et al. (2008) expressed that RS is associated with by repeated high cortisol reactions, which consequently cause a long-haul cortisol suppression. HRS levels may contribute to depression among university students (Mellin, 2008). Ayduk et al., (2008b) revealed that RS anticipated borderline personality characteristics, however, only for people low in administrative control. Furthermore, Individuals with higher dismiss susceptibility usually feel insecure and miserable about their connections and have a tendency to see ambiguous actions as an intentional rejection of important others. From one point of view, RS inclines people to respond with more aggression and antagonistic behavior (Romero-Canyas et al., 2010a). McLachlan, Gembeck, and McGregor (2010) found that high expectations of rejection as well as heightened susceptibility to prospect rejection incline to boost the probability of refusal and likewise raise the intensity of effect of the rejection. Experiences of SR can prompt to a decreased feeling of well-being in youth, disturb their social and romantic functioning, and hinder their capacity to function interpersonally with peers and instructors (Downey et al., 1998b; Downey et al., 2004; Feldman & Downey, 1994; Marston et al., 2010).

In addition, Staebler et al. (2011) indicated that both inpatients and outpatients with a borderline personality disorder had a higher RS contrasted with either healthful people or outpatients with an avoidant personality disorder, SA disorder, anxiety disorders, and temperament disorder (Staebler, Helbing, Rosenbach, & Renneberg, 2011). Supporting people who are sensitive to rejection explicating their behaviors

more adversely which drive them to compromise their close connections (Weeks, 2011). Likewise, the dorsal anterior cingulate cortex (DACC) is a major signal area related to the experience of repudiation. The anterior cingulate cortex (ACC) is pertinent for facets such as conflict identification, rewarding procedures, and the experience of distress, and may thusly be activated while encountering rejection (Premkumar, 2012). Comprehension of how RS can prompt to problematic relational conduct and hinder healthy procedures, for example, communication style in their connections, and additionally looking at possible mediators of these relations may assist promptly to more efficacious therapy for individuals with this merit or feature (Christman, 2012).

Ng and Johnson (2013) have reported in their study that people who have bipolar disorders are basically HRS than a healthy control group. Consequently, patients with actually depressed mood showed a greater level of RS than patients experiencing an intense manic disorder. Clinical and social psychology researches, as well as research on neuroendocrinology and neurocognition, have tried to distinguish associations of RS. A critical negative correlation was found between self-esteem scores, RSQ, and secure attachment. A considerable positive correlation was found among neuroticism and RSQ, introversion, social avoidance, social distress, interpersonal affectability, resistant attachment, and avoidant attachment. A significant relationship exists between the RSQ and attributions of deleterious or harmful intention after discounting the impact of each of the other variables or factors (Olson, 2013). Berenson and his colleagues found that the BPD group demonstrated a negative connection between increment rejection-contingent aggression in daily life and shorter latencies for rejection-primed words in the lab (Brown, 2014b). Overreactions to RS

are probably going to undermine social relations, and at least prompt to exclusion and rebuff (Downey et al., 1998b; Goldner, Abir, & Sachar, 2017).

#### **2.2.6.1 The relationship between rejection sensitivity and dissociation**

Downey and Feldman (1996) have hypothesized the matter of why individuals who anxiously expect rejection continue to become involved in relationships in which they frequently encounter rejection and considered that it may be an effort to accomplish authority. It is known that high RS people peculiarly manage relationship strife with antagonistic behavior and withdrawal of emotional support, and these behaviors continue in spite of their contribution to the end of the relationship. Since these behaviors oppose and conflict the hypervigilant attempts to defend against the likelihood of rejection, it might be that the part of the self-represented through these hostile upheavals is a dissociated emotional part of the self that is endeavoring to overcome the circumstance. The concurrent pain-relieving reaction incited or resulted upon re-exposure to the formerly stressful experience may serve to give an image of dominance and contribute to a counterproductive recurring pattern of relating (Downey & Feldman, 1996).

HRS individuals share defining attributes with formerly traumatized individuals as though rejection has been a traumatic event for themselves. Traumatized and HRS individuals exchange between re-encountering and trying to evade trauma or repudiation. They anxiously predict, promptly comprehend, and exaggerate their reaction to harmless stimuli as indices of the existence of the aversive stimuli. Overt attention to these signs decreases their ability to concentrate on the here-and-now and subsequently to build up a scope of aptitudes that would assist them to develop an



actual feeling of dominance. Basically, both traumatized and high rejection susceptible individuals appear to lose the ability to understand the internal and external stimulus effectively (van der Kolk, 2007b). Trauma has been depicted as a “physio neurosis” that makes people persistently alert and hyper-responsive to the circumferential threat because the brain improves in a utilization a dependent way, and re-introduction to anxiety, stress, or trauma-related stimulus leads to the reinforcing of related memory traces, these recollections can accomplish eclectic mastery. They turn out to be much more prone to be re-accessed (Van der Kolk, 2007a). The hyperarousal triggers the trauma-related memories and conversely, the trauma-relevant memories trigger the hyperarousal (Van der Kolk, 2007a). If early attachment loss is traumatic, disarranging, and dissociative procedures are used by the adopted child, illustrating the procedure will be important so that the adopted individual can both perceive the pattern and comprehend the significance or the content of the behaviors of which they need to become plainly cognizant (Olson, 2013).

#### **2.2.6.2 Aggressive behavior and rejection sensitivity**

There is a direct association between hostile behavior and RS. Cassidy and Stevenson (2005) in their study on adolescents who were predisposed to punitive action due to their aggressive behavior, found that RS represented a considerable degree of difference in violent behavior. The investigator proposes that individuals try to divert from their extreme sensitivity by behaving violently, which is viewed as the dysfunctional coping procedure. These hypotheses have been affirmed in a study that empirically included SR (Ayduk, Gyurak, & Luerssen, 2008a). Rosenbach and Renneberg (2011) used a fictitious conversation situation, once participants in the test had conveyed some information about themselves; they were dismissed by the potential spouse in the conversation. Later the participants were given the chance to

put hot sauce in the food of the individual who rejected them, the researcher has accounted for this as an index of interpersonal aggression (Hartley, 2006). HRS individuals (who had beforehand been eliminated) utilized more hot sauce than the individuals who were LRS. Additionally, Gupta (2008) demonstrated that RS is an important predictor of aggression in women's close associations; nonetheless, not in men's close relationships. Sandstrom, Cillessen, and Eisenhower (2003) denoted that RS eases the association between the rejection experience and externalizing disorders in children, which emphasizes the model's presumptions about RS (Sandstrom et al., 2003). RS may likewise be a mediating factor between certain personality qualities and deflector conduct (Hartley, 2006).

### **2.2.6.3 Rejection sensitivity and friendship quality**

In the research of intimate relations (e.g., Ayduk, May, Downey, & Higgins, 2003; Harper et al., 2006), the dynamics of the relationship are strongly affected by RS. Individuals vary in understanding and responses to rejection. Whereas some individuals act considerably and adjust promptly to undesirable personal actions or unsatisfied needs, others act ineffectively in reaction to comprehending deliberate rejection. HRS people account for and overreact maladaptively to minor or envisioned insensitive conduct of significant others. These responses, thus, undermine connections and well-being. RS studies concentrate on the process that indicates these expectations and responses to both predicted and real rejection. RS varies conceptually and experimentally from types of attachment (Downey & Feldman, 1996). Consequently, in settings where social support and acknowledgment of significant people are required, they probably sort out behaviors on the basis of conceivable rebuff. High rejection sensitive people are excessively sensitive to possible rejection, value evading such rejection, and come to be susceptible to straightforward prompts

of rejection by other people, especially valued ones. Moreover, people prone to frequently communicated rebuff in intimate relations can turn out to be highly vulnerable to rejection signs and generally anticipate rejection. That is to say, RS can be verbatim or metaphorical crosswise over connections and lifespan. Furthermore, rejection anticipations in the family may be recurring in other significant connections (e.g., companionship or romantic connections (Levy et al., 2001)). Therefore, high rejection sensitive people's behaviors may reduce the probability of maintaining a close, satisfying, and supportive connection (Feldman & Downey, 1994). Self-satisfying expectancies assume a part in rejection sensitivity in that the individuals who predict rejection will probably produce it (Downey et al., 1998a).

Forming a close relationship with a best friend has a major impact on the well-being of adolescents. Researches indicate that close friendship has positive relationship with better mental adjustment. Teenagers who do not have close friends have been found to experience low self-esteem, loneliness, anxiety, and depression at greater risk (Goldner, Sachar, & Abir, 2019). In friendship, it is desirable to experience acceptance and close emotional sharing, so that RS is likely to be critical in such settings. Both attachment security and RS are critical for friendship qualities as well as these constructs being related conceptually and experimentally. Young people who have been securely attached have lower RS than those who are insecurely attached; nevertheless, insecure groups have not varied (Feldman & Downey, 1994).

Individuals who engage in relationships with HRS comprehend the insensitivity of rejection partners even after controlling factors, for example, avoidant, anxious, and secure attachment also self-esteem (Downey & Feldman, 1996). Thus, as reported by Feeney (1998) stated RS can anticipate the quality of friendship beyond the protection

of attachment. In contrast, RS can also intervene or ease the impacts of attachment dimensions on the quality of companionship. Lastly, gender impacts both the quality of friendship (e.g., Ma & Huebner, 2008) and the types of attachment (Özen, Sümer, & Demir, 2011). In particular, while relationship is equally important to both genders, women are socialized to be more relationship-oriented, whereas men are socialized to be more independent (Cross & Madson, 1997). Though attachment theory does not particularly expect gender distinctions (van IJzendoorn & Bakermans-Kranenburg, 2010), males show higher attachment anxiety and higher avoidance than females (Özen et al., 2011). In addition, boys report less attachment to friends than girls do, and also the association between parental attachment and satisfaction was not mediated by peer attachment for boys, but it was for girls (Ma & Huebner, 2008).

#### **2.2.6.4 Rejection sensitivity and depression**

Low self-esteem, feelings of uselessness, or feelings of readily being dismissed were reported frequently among individuals who have symptoms of depression. As stated by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), in the criteria for diagnosing atypical depression, the long-term hypersensitivity to comprehend personal rejections is mentioned unequivocally (Rosenbach & Renneberg, 2011). SR is a significant risk factor for depression and for the association between depression and RS. In Fact, apart from actual or perceived social rejection, RS is unlikely to result in negative emotional states (Kraines, Kelberer, & Wells, 2018). The associations of RS and depressive indications, and in addition a conceivably alternately reinforcing mutual impact between RS and symptoms of depression, could subsequently be hypothesized. Symptoms of depression were positively correlated with RS in a group of dejected outpatients and inpatients (Gilbert, Irons, Olsen, Gilbert, & McEwan, 2006). RS expects the symptoms

of depression symptoms in women after stressful experiences, particularly subsequent after their partners left them. In contrast, when the woman herself ends a relationship or experiences an academic failure, HRS women do not demonstrate increased depression scores (Ayduk et al., 2001).

HRS is considered a threat factor for depressing responses by women especially when what they fear occurs and takes place, specifically if she was dismissed by someone else. Appealingly, McCarty and colleagues (2007) in a longitudinal research stated that RS has no prophetic impact on consequent dejection; however, most likely an inverse causal relationship, as a result, people with depressive indications demonstrate increased scores for RS. This makes one doubt, from one perspective, that the usual withdrawal behavior of depressed individuals can prompt frequent experiences of rejection and enhance HRS. In contrast, feeling guilt and disgrace due to some psychological disorders might provoke feelings of being afraid of rejection or being stigmatized among depressed people. Therefore, RS can be distinguished as a specific event leading to a hazard factor for indications of depression; or RS can be provoked by depressive behavior in interpersonal interactions (McCarty et al., 2007).

In a research conducted by Harper et al. (2006), it was proposed that RS is associated with depression partially mediate the individual's repression of his own particular feelings and requirements, with the objective of evading strife in social associations (self-silencing). Therefore, HRS individuals who set aside their own particular requirements because of fear of conflict are specifically prone to experience the ill effects of depressive symptoms. If the RS model is mediated by these outcomes, these behaviors could be dysfunctional responses that can prompt real rebuff that

therefore heightens the level of RS (McDonald, Bowker, Rubin, Laursen, & Duchene, 2010). Likewise, the relationship between RS and dejection is affected by the number of positive social relationships. Therefore, HRS teenagers who indicate having a positive relationship with their parents or peers are less dejected than those who do not have positive connections. Social relationships might subsequently reflect the defensive factor of the RS model (Rosenbach & Renneberg, 2011).

#### **2.2.6.5 Rejection sensitivity and parenting practices**

Frequently the establishment of positive parenting, as well as positive parenting practices, for example, parental encouragement, boundary setting, and warmth have been connected to the enhanced feelings of kinship of children, and adjustment to social and emotional functioning and a higher ability for independent conduct (Baumrind, 1991; Skinner, Johnson, & Snyder, 2005; Steinberg & Silk, 2002). This is even though some practices that infer or obviously expound rejection have been connected to an increased likelihood of symptoms of psychological health in childhood and adolescence and in adulthood. These mostly aggressive methods of parenting infer or clearly demonstrate psychological control, force, or rejection (Skinner et al., 2005). A higher level of internalizing and externalizing indications in adolescence has been associated with these negative parenting practices (Barber, 1996; Steinberg & Silk, 2002) and also with less adaptive social work for teenagers (Wood, McLeod, Sigman, Hwang, & Chu, 2003).

Being rejected by parents involve obvious and hidden exhibits of disdain, rejection, and disapproval of the child and his or her behavior. Children may understand their parents' rejection once they seek their support and help and are met with criticism, negative emotional responses, or cruelty instead. According to Barber

(1996), parental psychological dominance additionally has a relationship with undermining self-control yet can be delicate in forms. Mental control alludes to the parent's negative parasitic efforts to control self-regulation or the child's choice emotionally and behaviorally. Ultimately, forcible parenting styles are over-dominant, confine the efforts of the child towards self-rule, and require compliance of the child to parental control needs (Skinner et al., 2005). Simultaneously, these phases of dismissal and control of child rearing can undermine and intercept the requirements for kinship for teenagers, undermine their feelings of efficiency, and limit independent activities (Miller, Deci, & Ryan, 1988; Skinner et al., 2005). During early adolescence, a period in which the development of autonomy is highly distinctive (Zimmer-Gembeck & Collins, 2003); such restrictive self-rule parenting practices are connected to dejection and externalizing behaviors. As the initial social connection, parent-child relationships are an opportunity for children to learn about future social interactions in term of efficiency, optimism, and confidence. In the phase of negative child-rearing encounters, however, teenagers might develop predictions of SR, RS, and abandonment about future social connections (Rowe, Gembeck, Rudolph, & Nesdale, 2015).

#### **2.2.6.6 General discussion of past studies**

There are a huge number of studies that discussed RS and its relationship with other variables and according to some of these studies RS was found to correlate with typical depression. RS can be provoked by depressive behavior in interpersonal interactions (Derecho et al., 1996; Downey & Feldman, 1996; Downey et al., 1998a; Gilbert et al., 2006; Joyce, Mulder, McKenzie, Luty, & Cloninger, 2004; McCarty et al., 2007; Mellin, 2008; Ng & Johnson, 2013; Parker et al., 2002). Several studies found that there is a direct relationship between RS, insecurity, and aggression

(e.g. Ayduk et al., 2008a; Ayduk et al., 2003; Hartley, 2006; Jacobs & Harper, 2013; Purdie & Downey, 2000; Romero-Canyas et al., 2010a). Some studies indicated that RS is a predictor of borderline personality (Ayduk et al., 2008b; Staebler et al., 2011).

Furthermore, RS was found to overlap with SA and SA increases the predictions of rejection in interpersonal situations as well as RS being associated with the subtype of SA, which involves the fear of negative evaluation by others (Aune & Stiles, 2009; Bowker et al., 2011; Harper et al., 2006; Kross et al., 2007; London et al., 2007; Nezlek et al., 1997; Rosenbach & Renneberg, 2011; Staebler et al., 2011; Tsirgielis, 2015). It was found that RS also reduces the possibility of keeping up intimate relationships and supportive connections, besides that being accepted by at least one close friend mitigates the experience of rejection as well as lowering the scores on RS (Bowker et al., 2011; Downey & Feldman, 1996; Feldman & Downey, 1994; Tsirgielis, 2015). Moreover, the relationship between parent and child develops the prediction of RS as to future connections (Downey et al., 1997; Rowe et al., 2015). Moreover, RS was reported to decrease the feeling of well-being among youth (Downey et al., 1998b; Downey et al., 2004; Feldman & Downey, 1994; Marston et al., 2010).

In experimental works, RS has been assessed mainly utilizing diverse forms of the RSQ and the interpersonal sensitivity measure (IPSM) (Boyce & Parker, 1989). When Downey and her colleagues formulated the RSQ, they considered defensive anticipations of rejection as an essential element of RS (Downey et al., 1997). They operationalized RS as concerned or angry anticipations of refusal in circumstances where refusal is conceivable. Grounded on this conceptualization, Downey and Feldman (1996) established a tool to measure RS (the RSQ-Personal) and this



instrument measures two components: the anxiety of rejection and expectations of rejection. Investigators have argued that RS is acquired from experience (Romero-Canyas et al., 2010) and that the learned essence of rejecting feelings indicates that RS might be situation-based (Levy et al., 2001). Therefore, recently many measures have been created to assess RS for various people, involving the adult RSQ (Berenson et al., 2009), the Children's RSQ (Downey et al., 1998b), the weight-based RSQ (Brenchley & Quinn, 2016), the appearance-based RSQ (Park, 2007), the race-based RSQ (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002), the gender-based RSQ (London, Downey, Romero-Canyas, Rattan, & Tyson, 2011), the age-based RSQ (Kang & Chasteen, 2009), the status-based RSQ for Asian Americans (Chan & Mendoza-Denton, 2008), and the sexual minority women rejection sensitivity scale (Dyar, Feinstein, Eaton, & London, 2016). On the other hand, many studies have been conducted to validate RSQ into different contexts, such as the Italian version by Innamorati et al., (2014), German version by Staebler, Helbing, et al, (2011), Persian version by Khoshkam et al. (2012), Korean version of the rejection sensitivity by Lee (2000) and Turkish version by Erozkhan (2004). However, there is no instrument based on Yemeni culture in particular and Arabic culture in general to measure rejection sensitivity. Besides that, no similar study has been conducted on Yemeni youth. This study also differs from past studies in using social anxiety as a criterion to validate RSQ. The contents of Y-RSQ is based more on Yemeni Culture.

### **2.2.7 Measurement of rejection sensitivity**

Two versions of rejection sensitivity questionnaire (RSQ) (18 items and 8 items) were developed based on this presumption; this questionnaire provides participants with different speculative situations in which they should make a request of another person. Participants have to respond to two Likert scales. First, they are

required to distinguish the level of their anxiety or concern about the reaction of others towards their request. Second, they are required to indicate the expectations about whether their request would be fulfilled or rejected by that person. The hypothesis is that an individual with RS would be concerned about the result of their request as well as predict an outcome that would result in them being rejected. “The RSQ includes a diverse list of situations involving parents, friends, teachers, romantic partners, potential romantic partners, and potential friends” (Merkosky, 2013, p. 10). The RSQ was particularly developed to be used among university students; hence, items portray stances that ordinarily happen in this target population (Merkosky, 2013).

Downey and Feldman (1996) built up the RSQ with 18 imaginary social stances that are possibly pertinent to rejection, with the purpose of identifying the level of RS. The participants have to evaluate their concerns on the RSQ situations, and additionally the probability of rejection. There are two available versions of the RSQ, one for adults and the other for children; additionally, the RSQ was adjusted to be used among specific samples of a patient (e.g., gender-specific rejection sensitivity). Besides this instrument, two different scales are related to RS, which are really designed to measure different constructs. The first one is the interpersonal sensitivity measure (IPSM); this measure distinguishes unnecessary and excessive consciousness of, and sensitivity to, the feelings of others' and behavior (Boyce & Parker, 1989). The IPSM utilizes questionnaires such as “interpersonal awareness, need for recognition, separation anxiety, shyness and fragile inner self” (Rosenbach & Renneberg, 2011, p. 89), in this way a substantially more extensive series of interpersonal perceptions, while the rejection sensitivity questionnaire deals just with the anticipation and comprehension of being rejected. This questionnaire requests participants to assess themselves in social interactions, while RSQ accounts for individuals' anticipation

about being rejected by other people (Rosenbach & Renneberg, 2011). The second one that ought to be mentioned is the 'interpersonal sensitivity' subscale of the Symptom Check List (SCL-90) (Derogatis, Rickels, & Rock, 1976); it measures a broad range from minor social instability to the feeling of integral individual insufficiency. This scale required the participants to conduct self-appraisal and self-assessment in social interaction, though the RSQ records the particular prediction of being rejected by others. This prediction of being rejected may, hypothetically, be highly autonomous of the individual's self-esteem. A great deal of literature has been generated with respect to rejection sensitivity in an assortment of populations. Jacobs and Harper (2013) have tested sensitivity to rejection with regards to neural dynamics, intimate/dating connections, race, and its effect on health psychology. An assortment of measures of RS has been created by the procedure of refinement and further the work of others. Downey and Feldman (1996) built up a measure owing to understand the function of RS in personal connections and set up initial construct validity for their measure. Mendoza-Denton, Downey, Purdie, Davis, and Pietrzak (2002) produced a measure to specifically test race-based RS while Pachankis, Goldfried, and Ramrattan (2008) additionally developed their work to generate a rejection sensitivity measure suitable for examining sensitivity to rejection linked with sexuality. In order to examine how RS mediates interpersonal conduct in the setting of a relationship, Slimowicz (2011) initially tried to validate the construct and develop RSQ.

#### **2.2.8 Expanding rejection sensitivity measures**

Extra measures were put in place to take advantage of more particular aspects of rejection as an extension to the RS model. Interviewing children exposed that whereas young people incline to feel apprehensive in expectancy of repudiation, children show the feeling of fury (Downey et al., 1998b). The meaning of sensitivity

to rejection was extended to include the feeling of anger, Downey, et al. (1998) developed the "children's rejection sensitivity questionnaire". Additionally, a study on RS added a race-based factor to the original model of RS. Specifically, they hypothesize that race can be a core contributor to the anxious anticipation of rejection for some individuals (Mendoza-Denton et al., 2002). The "rejection sensitivity questionnaire-race" (RSQ-Race) has been produced and operationalized as the anxious anticipation about the likelihood of being rejected based on race on pertinent circumstances. This kind of rejection can include discrimination, maltreatment or exclusion based on the race of individuals (Mendoza-Denton et al., 2002).

The "adult rejection sensitivity questionnaire" (ARSQ), which was adapted from the original RSQ, was intended to be used on adults in a general setting. The content of the situations related to school life has been removed and extra situations related to possible rejection stances in adults' lives were included. The ARSQ consists of nine situations and this measure was highly associated with the original RSQ. In addition, some studies concerning the adult population in general life settings have utilized the ARSQ in place of RSQ (Berenson et al., 2009). "gender rejection sensitivity questionnaire" (Gender-RSQ) was produced recently for the purpose of assessing the possibility of RS based on gender. Items of Gender-RSQ were chosen with respect to the literature review on gender discrimination and through focus groups, items that were similarly distressing to both genders were chosen, however, were more likely to evoke the levels of RA based on gender among women. This measure was utilized to effectively assess based gender RS in a sample of women joining an elite, competitive program in university (London et al., 2011).

## **2.3 Social Anxiety**

SA is the strong feeling of a person's trepidation, concern, and nervousness in the context of social interactions (Erath, Flanagan, & Bierman, 2007). SA is identified by an extreme fear of interpersonal appraisal and the probability of becoming embarrassed before others (La Greca & Lopez, 1998). SA is featured by the persistent and excessive fear and avoiding of negative evaluation by other persons (American Psychiatric Association, 2013). These people like to engage in social interactions, but they fear failure. Therefore, they face difficulties in establishing close relationships with others. The problem of social relations was proposed as an important and complicated problem, mainly for people with SA in the virtual world (Green et al., 2016; van Deursen et al., 2015).

While the short-term experience of SA is common for people, such feelings can grow into serious and long-lasting problems for some people, preventing future social functioning and development. During adolescence, SAD is the most prevalent anxiety disorder (Ollendick & Hirshfeld-Becker, 2002). The life span of SAD pervasiveness is around 12.1%, and the symptoms of SAD starts early, with 50% of people starting at age 11 and 80% experience SAD symptoms at age 20, based on a report from the National Comorbidity Survey (Stein & Stein, 2008). Per se, adolescence is a critical period in the development of SAD, and it is essential to understand both SA and the factors that may play a role in developing and maintaining its symptoms (Coyle & Malecki, 2018).

### **2.3.1 Social anxiety theory**

There are several theories that are related to social anxiety. These theories are explained below.

### **2.3.1.1 Social learning theory**

Social learning theory posits that “psychological functioning is explained in terms of a continuous reciprocal interaction of personal and environmental determinants” in which “symbolic, vicarious, and self-regulatory processes assume a prominent role” (Bandura, 1977, pp. 11-12). According to social learning theory, social anxiety may develop as a result of negative social outcomes and lack of modeling or teaching of how to effectively cope with difficult social situations. Social avoidance, used as a way to cope with the anticipation of negative social outcomes, may hinder opportunities in which social skills develop (Rapee & Spence, 2004; Schneider, 2009). There is an interactional process in which social avoidance along with experience of negative social outcomes impede psychosocial development and prolong a belief that social interactions cause negative outcomes. Additionally, poor social skills can lead to experiences of adverse social consequences (Rapee & Spence, 2004).

### **2.3.1.2 Genetic/biological theory**

Theoretically, there are thought to be biological substrates to psychiatric disorders such as SAD. SAD is considered to be familial in that there are higher rates of the disorder among first-degree relatives (Keller, 2003). This correspondence is thought to be due in part to genetic transmission (Bögels & Brechman-Toussaint, 2006; Rapee & Spence, 2004). Reviews of the literature on SAD have indicated that the heritability of SAD is somewhere between 30% to 65% (Lampe, 2009; Rapee & Spence, 2004). However, some researchers have deemed this to be an overestimate, and it has been noted that this genetic predisposition is likely not specific to social anxiety, but common amongst a variety of emotional disorders,

such as depression and anxiety (Bögels & Brechman-Toussaint, 2006; Lampe, 2009; Rapee & Spence, 2004).

### **2.3.1.3 Cognitive-behavioral theory**

In addition to ideas based on social learning theory, direct conditioning, as well as cognitive processes, have been discussed as etiological and maintaining/mediating factors in the development of SAD. Beidel and Turner (2007) suggested that a series of conditioning events, such as the social events conditioning mentioned previously, may produce a fear response that then becomes associated with those conditioning events (e.g., social interaction). Rapee and Spence (2004) reported that SAD “is characterized by biases and distortions in social-information processing and thoughts, attitudes, and beliefs that are thought to produce and sustain affect and behaviors associated with social phobia” (p. 748). Socially anxious persons have a tendency to form a mental representation about how they are seen by others, assume that others are generally critical and evaluate others negatively, predict how they will be judged by others, attach a high level of importance to being evaluated positively by others, and focus their attention on their self-image and perceived threats (Rapee & Heimberg, 1997; Rapee & Spence, 2004). These processes occur regardless of whether evaluation actually occurred (Rapee & Heimberg, 1997). Individuals diagnosed with SAD seem to interpret social interactions with a negative bias that leads to anxiety/fear which in turn affects the person’s mental representation of how others view him/her (Beidel, Turner, & Association, 2007; Rapee & Heimberg, 1997; Rapee & Spence, 2004).

### 2.3.2 Past studies of social anxiety

In general, according to the World Health Organization (1994), the experience of social anxiety features a caution of outsiders and social anxiety when facing new, bizarre or socially intimidating situations or according to American Psychiatric Association (1994) it is identified by a persistent, excessive fear of humiliation or negative evaluation in social or performance situations (as cited in West, 2004). This fear often leads to avoidance of evaluative and/or social situations. Symptoms associated with social anxiety include blushing, excessive perspiration, gaze avoidance, heart palpitations, panic attacks, or cognitive symptoms such as heightened self-awareness and apprehension (Heckelman & Schneier, 1995). Nine to twelve-year-olds and adolescents with social anxiety frequently report anxious cognitions relating to a desire to escape from a threatening situation, failure, negative evaluation, embarrassment, humiliation, self-criticism, and inadequacy (Ollendick & Hirshfeld-Becker, 2002). These symptoms may cause profound discomfort, the avoidance of threatening situations, and result in significant interference with peer and family relationships. People with extreme social anxiety are likely to experience emotional distress, social isolation, occupational maladjustment, and frequently suffer from generalized anxiety, avoidant personality disorder, depression, obsessive-compulsive personality disorder, and suicidal ideation (Beidel et al., 2007). Youth with social anxiety disorder frequently present with comorbid conditions such as selective muteness, other anxiety disorders, oppositional defiant disorder, major depression, and conduct disorder (West, 2004).

One argument in the literature is that social anxiety reflects shyness in its more severe form. Although there is a considerable overlap between shyness and social anxiety, the accurate relationship between the two conditions has not been determined.



When the up-to-date diagnostic criteria for social anxiety are applied, the disorder varies significantly from shyness with respect to epidemiological course, sternness of symptoms, and clinical correlates. However, social anxiety at less extreme levels may look more similar to shyness, manifesting in discomfort in social situations, withdrawal, self-consciousness, being easily embarrassed, and having less interpersonal self-confidence (West, 2004).

### **2.3.3 The relationship between social anxiety and rejection sensitivity**

RS indicates the sense of personal insufficiency and misunderstanding of others' behavior, in which perceiving rejection leads to discomfort and fear. This concept is directly linked to a fear of other people's negative evaluation and a fear of embarrassment, which are the key features associated with SA. Nevertheless, RS differs from the fear of negative appraisal in that the latter relates to a wider framework linked to nervous anticipation of others' evaluations, rather than a particular concern to expect rejection from others, which better exemplifies the former (Fang et al., 2011).

In recent years, a lot of work has been done to explore the behavioral outcomes of RS. One of the behavioral outcomes implicit in the theory of rejection sensitivity is social anxiety. As the theory purports, people with RS have a predisposition to perceive, expect or overreact to rejection either anxiously or angrily. It follows, then, that these individuals may exhibit social anxiety/withdrawal or hostility/aggression when they perceive interpersonal rejection. London, Downey, Bonica, and Paltin (2007) conducted a longitudinal study examining the social functioning of middle school students. They were interested in whether angry or anxious expectations of rejection anticipated increases in social anxiety/withdrawal, loneliness, or aggression,

and whether anxious expectations of rejection (as opposed to angry expectations) specifically predicted the type of interpersonal difficulty experienced (i.e., social anxiety/withdrawal). They utilized the CRSQ to measure rejection sensitivity, as well as a children's measure of social anxiety and a measure assessing children's loneliness and social dissatisfaction. The subjects were 150 sixth grade students in a low socioeconomic urban neighborhood. The authors found that anxious expectations of rejection at Time 1 significantly predicted social anxiety and social withdrawal at Time 2. On the other hand, angry expectancies of rejection significantly predicted a decrease in social anxiety (Edwards, 2014). They identify anxious expectations of rejection as a distinctive source of susceptibility to SA. Anxious anticipations thus fuel "flight" reactions (SA). Consequently, although anxiety is relatively highly associated with rejection in situations where rejection is anticipated, these results verify the significance of recognizing these affecting conditions. Whether teenagers feel anxiety, anger or both in conditions where they think rejection might expect their relative susceptibility to hostility or SA/withdrawal (London et al., 2007).

McDonald, Bowker, Rubin, Laursen, and Duchene (2010) utilized a sample of 277 ninth-graders. They looked at whether anxious rejection sensitivity predicted social anxiety and depression when angry RS was regulated. The results revealed that both anxious and angry rejection sensitivity were linked with SA and depressive symptoms, but only anxious RS uniquely predicted these internalizing symptoms (Edwards, 2014).

Avoiding social situations due to being afraid to act and behave in an embarrassing way is considered one of the criteria for social anxiety. Fear of being negatively evaluated or eliminated thusly presumes more significance. London et al.

(2007) reported in a longitudinal research, that RS (in time 1) is related to social anxiety and social withdrawal (in time 2, after 4 months). They likewise indicated that rejection only prompts HRS in men, however, not in women participants, while social consideration or implication by peers lower the sensitivity in both genders. These outcomes are in line with McDonald and her colleagues (2010), who also reported that, regarding SA, the degree of anxiety symptoms is lessened by the number of positive social connections (Rosenbach & Renneberg, 2011).

The symptoms of SA overlap with RS Anxiety. In SA, there is increased withdrawal from social situations, which heightened the fear of averted stances (Aune & Stiles, 2009). This avoidance causes increased SA and feelings of loneliness, and dejection. RS-young people, who withdraw from their peers as an attempt to evade rejection experience internalizing problems. Internalizing problems involve emotional symptoms coordinated with anxiety and dejection disorders, for example, loneliness, feeling socially hopeless, and self-awareness (Marston et al., 2010; Melfsen & Florin, 2002; Rimm-Kaufman & Kagan, 2005; Weeks et al., 2009). Additionally, SA indications may cause increased predictions of rejection in interpersonal stances, and have correlated anxious anticipations of RS with SA (Feldman & Downey, 1994; Harper et al., 2006; London et al., 2007).

Both RS and SA youth frequently withdraw from their peer group to avoid possible rejection, which causes emotional symptoms (loneliness, depression, anxiety) that regularly prolonged the problem, either SA or RS-Anxiety. Anxious expectations of rejection anticipated increases in SA over time provide support for a unidirectional relationship between anxious expectations leading to increased feelings of social anxiety (Bonica, 1999). This connection between RS-Anxiety and SA becomes clearer

the effect of social support on internalizing issues was inspected (Tsirgielis, 2015). Supportive relationships with either parents or peers were found to mitigate the association between rejection sensitivity-anxiety and SA in older adolescents (aged 14 and older) (McDonald et al., 2010). Supportive and positive friendships were found to help prevent the internalizing problems such as anxiety and depression. Social relationships also provide support and validation; therefore, adolescents who do not have a supportive friendship had high levels of both anxiety and depression. In a previous research, it has likewise been reported that supportive connections have the ability to change an individual's anticipation for rejection (Downey & Feldman, 1996).

Social connections are suggested to provide support and effectiveness. To this end, Tsirgielis (2015) examined the effect of social supports on an adolescent's RS-Anxiety and SA scores. The study gives evidence that social supports are absent in youth who are suffering from SA, or high in RS-Anxiety, as a youth with social supports had lower levels of both RS-Anxiety and SA measures. His study likewise highlights the significance of social supports as a protection measure against internalizing issues (Tsirgielis, 2015). Another review found that RS was fundamentally associated with three subtypes of SA, which involve the fear of negative assessment, social avoidance for novel situations, and social evasion for public stances (Bowker et al., 2011). Tsirgielis (2015) additionally found that having an intimate friend lessened scores on RS-Anxiety and SA. More particularly, adults who stated having at least one mutual best friend were found to have lower scores on the negative assessment scale for SA. Negative assessment in SA makes youth avoid social situations because of a fear they will be judged and others will think badly of them. This study also suggested that mutual and supportive friendships are a deterrent against SA and RS-Anxiety. Finally, there are some common things between RS-Anxiety and

SA regarding their effect on cognitive and affective processing (Tsirgielis, 2015). Studies on supportive friendship implied that having a mutual intimate friend could mitigate the social evaluative concerns and negative assessment stresses correlated with RS (Cavanaugh & Buehler, 2015). The outcomes of the literature offer support that RS-Anxiety and SA lead to emotional issues, for example, withdrawal, loneliness, and discouragement, which promptly expanded susceptibility to repudiation, and social anxiety, recommending a bidirectional relationship (Tsirgielis, 2015).

Additionally, past studies have failed to show that watchfulness for SR signs is expressly disassociated with the identification of these cues. Extreme emotional and defensive reactions can expound either identification or watchfulness. Nevertheless, watchfulness and identification of SR signals are diverse procedures. The experience of an inconsistency could portray the transitory event of identification of RS signs, which often trigger anxiety and distress (Eisenberger & Lieberman, 2004; Jonas et al., 2014). Then again, vigilance is a long-term status that is depicted by the simplicity of presence and the extend attentiveness regarding hints of SR, which hold up consideration regarding the differences of environmental features of the surroundings (Romero-Canyas et al., 2010a). Thus, the vigilance and detection of SR signs could be influenced by individuals dispositions as well as being represented by various neural relates (Romero-Canyas & Downey, 2005).

Afram (2013) in his study suggested that social anxiety increases risk regulation: Individuals with high social anxiety strongly want both the belongingness provided by attachment to their partners as well as want to defend themselves against the possible pain of rejection from romantic partners, giving the priority to the latter. He tested his model with a sample of 51 couples that were brought into a laboratory

and separated. One member was assigned to the rejection condition group in which they were told that their partners listed a lot of negative characteristics about them, whereas the other was assigned to the nonrejection condition group in which they received an inoffensive filler task during the inducement stage of the study. Amongst the members in the rejection condition group, social anxiety exhibited a unique positive correlation with anxiety about partners listing negative characteristics. Among all members, social anxiety showed a unique positive relationship with the need to belong. Constant with his proposed model, social anxiety interrelated significantly with experimental condition, Individuals with high level of social anxiety who got the rejection induction evaluated their partners significantly more negatively after the induction, whereas individuals high in social anxiety who received the inoffensive induction evaluated their partners significantly more positively after the induction (Afram, 2013).

In a study conducted by Papsdorf and Alden (1998), SA was correlated with SA. Nevertheless, the magnitude of this relationship was moderate and indicates that, as these outcomes demonstrate, other factors also contribute to rejection. People with higher levels of social anxiety showed more behavioral signs of anxiety than non-anxious people. This is in line with a past study of behavior of socially anxious persons and proposes that many social anxious people held a belief that their anxiety is noticeable to others, which may be accurate (Bruch et al., 1989). Obvious signs of anxiety were associated with SR, but this effect was modest; therefore, there was only a minor propensity to hate persons who looked anxious more than those who did not (Papsdorf & Alden, 1998). Rejection sensitivity also was correlated with loneliness and social anxiety among early adolescents (Rowe et al., 2015).

### 2.3.4 **Differentiation between rejection sensitivity and social anxiety**

There are essential differences between RS and social anxiety (SA). SA is characterized by general feelings of insecurity in social stances; it is dominated by personal insufficiency and feelings of nervousness. Regardless of the overlap between RS and SA, the former alludes to an essential presumption which is that during social interaction, an individual will be dismissed, and not due to an individual's self-evaluation. RS is related to anxiety, as well as associated with feelings of anger or disdain. Another significant difference is the idea of interpersonal susceptibility. According to Hall and Bernieri (2001), interpersonal sensitivity could be defined as the precision and appropriateness of the individual's conception about how others feel, intent, and behave with him/her (Hall & Bernieri, 2001), besides the primary understanding of the feeling of sympathy. Nevertheless, in the literature in the English language, the usage of the interpersonal sensitivity term was to depict both SA and RS (Rosenbach & Renneberg, 2011).

## 2.4 **Summary**

In this chapter, the researcher described rejection sensitivity theory and the main theories that Downey and Feldman 1996 have used to develop this theory as well as the conceptualization of rejection sensitivity in different contexts. In addition, the relationship between rejection sensitivity and other disorders such as depression, social anxiety, and aggression was addressed. To measure rejection sensitivity, the researcher utilized rejection sensitivity theory that was the foundation of the development of rejection sensitivity questionnaire. The theoretical framework was provided in this chapter as well. In this chapter the researcher also discussed social anxiety and its relationship with rejection sensitivity.

## CHAPTER 3

### METHODOLOGY

#### **3.1 Introduction**

This chapter presents the methodology that has been used in this study, participant selection, the psychometric proprieties of the instruments that are used in this study, the method that was used to collect data, the procedures that were followed to validate the instrument, as well as the statistical procedures and the process of data analysis.

#### **3.2 Research Design**

The type of this study is quantitative (survey study); Creswell (2012) stated that quantitative research is an inquiry approach that is beneficial to describe trends and explain the connection between variables established in the literature. To perform this inquiry, the investigator appoints very specific questions, determines or develops instruments for data collection and data analysis using different statistical tests in order to get answers for the queries. Based on the outcomes of the data analysis, the researcher infers and explains the findings utilizing past hypotheses and studies. The final report has to be presented in a standardized format, demonstrate researcher objectivity and avoid bias. In quantitative research, investigators distinguish a research problem in light of the trend in the field or of the necessity to clarify why something happens. Depicting a trend implies that a problem of the study can be addressed best by conducting a study in which the analyst tries to set up the general inclination of reactions from people and to notice how this propensity differs among individuals. Outcomes from this research can indicate how a vast population sees a problem and the variety of these perspectives. Nevertheless, some research problems in quantitative studies require investigators to clarify how or in what ways a variable could influence another (Creswell, 2012).



### **3.3 Survey study**

Three distinctive features of survey study are identified by Kraemer (1991). The first is that survey study is used to quantitatively depict particular features of a given population. These features regularly include investigation of the relations among variables. Second, the required data for the survey study are collected from people so they are subjective. Lastly, the survey study utilizes a chosen portion of the population from which the results can be generalized later back to the population. In the survey study, dependent and independent variables are employed to describe the focus of the study but cannot be clearly controlled by the researcher. The initial step for conducting the survey is establishing a model that identifies the predicted relationship between the variables of study. The survey is then developed to test this model against observations of the phenomena (Glasow, 2005).

Levy and Lemeshow (1999) indicated that there are two phases of survey study. First, it is necessary to develop a sampling technique. The method of sampling is the procedure used to choose the sample from the population. The sampling procedure explains the process to be used to choose the sample, how to determine an appropriate sample size, and the selection of media to spread or administer the survey. Survey media comprise personal interviews, telephone and online surveys using either mailing or electronic email. Second, protocols must be developed to obtain population estimates from the sample data and to assess the consistency of those population estimates. This process comprises determining the target response rate and the optimal degree of survey accuracy (Salant & Dillman, 1994). Survey study techniques involve responses from the individuals who use the survey data and those who administer the survey. The data users must determine the variables to be assessed, the validity and reliability are required to confirm the effectiveness of the estimations, and any resource

restrictions that may occur in relation to the administration of the survey (Levy & Lemeshow, 1999). The individuals who administer the survey have to give additional information on resource requirements and provide different sampling techniques that they consider feasible and suitable for the task. Statisticians mix these inputs to construct a survey layout that meets the requirements of data users within the specific resource limitations (Glasow, 2005).

### **3.4 Population**

As the research design is determined, the next appropriate step to start the research process is identifying the population, as recommended by Creswell (2009). The targeted population of this study is Sana'a University undergraduate students. The faculties of Sana'a University are divided into six branches, three are located in the center of the capital but in different neighborhoods and the rest are located in the suburbs. The first branch is located in the center of the capital and includes the Faculty of Science and Faculty of Art and Human Science. The second branch is located in another neighborhood in the capital and includes the Faculties of Engineering, Computer and Information Technology, Commerce and Economics, Agriculture, Law and Legislation, Education, and Languages and linguistics. The third branch is located in yet another neighborhood in the capital and includes Faculty of Medicine, Faculty of Dentistry, and Faculty of Pharmacy. The other three branches are located in a suburb of the capital and they include Faculty of Education only. Tables 3.1 shown the targeted population. The faculties that are involved in this study are Faculty of Art and Human Science, Faculty of Medicine, Faculty of Engineering, Faculty of Education, and Faculty of Commerce and Economics. For the purpose of selecting the sample, the researcher has referred to the administration office for each faculty to ascertain the

actual number of the students who enroll in the five involved faculties for the academic year 2017/2018. The total number of students in these faculties is 27905, see Table 3.1.

Table 3.1

*Number of students who enroll in faculties of (Art and Human Science, Medicine, Engineering, Education, and Economy) year 2107/2018*

Faculty	Male	Female	Total
Faculty of Art and Human science	1862	4490	6352
Faculty of Medicine	628	767	1395
Faculty of Engineering	1489	272	1761
Faculty of Education	2498	4985	7483
Faculty of Economy	7590	3324	10914
Total	14067	13838	27905

### 3.5 Sampling

A sample is a subgroup or a fraction of a population chosen to take part in the study. The procedure of choosing a part of the population to represent the whole population is known as sampling (Polit & Beck, 2014). The sampling method that is used in this study is convenient sampling. In convenience sampling, a researcher selects the sample from people whom s/he has easy access in a simple way. Hence, it does not characterize any group apart from itself, as generalization to a wider population is not in his/her scope of interest (Cohen, Manion, & Morrison, 2004). Convenience sampling is used in this study because the current civil war in Yemen limited the population of study to only one governorate (Sana'a). The chaos prevails in many cities like Taiz, Aden, and Alhodaydah since 2011 but this war worsens or intensified since 2015, which led to a huge displacement of the population from different Yemeni cities and affect the normal life. Sana'a province is currently considered somewhat safer compared to other governorates in Yemen. The reason behind the selection of Sana's

University is that it is the first and largest public university in Yemen and includes individuals from all the provinces as Sana'a University is a destination for many students to further their studies. The study continues in spite of the general conditions of the country and the cut off the wages of academic staff and that facilitated the process of the fieldwork. Convenient sampling is also an applicable alternative to attain fast and timely information from members of the population who conveniently have time to provide the response. Many researchers choose this sampling technique because it is fast, low-cost, easy and the respondents are voluntarily available (*Convenience Sampling*, 2009). Though it is easy to recruit respondents, the risk of bias is greater than in a random sampling since each member of the population does not have an equivalent opportunity of being involved in the sample. Therefore, the attained outcomes might not be generalizable to the whole population.

In this study, the researcher has sampled twice; the first sample was selected from the Faculty of art and Human Science. To choose the sample that best resembles the majority of the population in this faculty as far as possible, the researcher has referred to the procedure of deciding the sample size table for a limited or identified population. Based on Krejcie and Morgan's table (1970), if the population is 6000 or close to it, the sample size has to be 361. Systematic random sampling was used to choose the 361 participants from this faculty (see Table 3.2.) Based on the list of students enrolled in the faculty for the academic year 2017/2018, the researcher divided the total number of students by the sample size ( $6352/361= 18$ ), then selected every 18<sup>th</sup> in the list to achieve the required sample size.

Table 3.2

*Sample one*

Gender	Number	Percentage
Male	106	29%
Female	255	71%
Total	361	100%

The reason behind collecting data from another sample is that the results of confirmatory factor analysis for the first sample indicated inferior model fits (GFI = .840, AGFI = .795, RMSEA = .082, CIMN = 3.415). Therefore, another sample of (n=210) 147 males and 63 females, was selected from different faculties of (Medicine, Engineering, Education, Commerce and Economics) in order to assure the variability and improve the fit indexes of the confirmatory factor analysis. The respondents in the second sample were selected conveniently because schedule constraints, location, and the difficulty of access to these faculties make it difficult to use random sampling. In this case, the researcher created a Google Form for rejection sensitivity questionnaire and social anxiety questionnaire, then the google form link was distributed to the second sample through the faculties' social media (Facebook and WhatsApp groups of the faculties that researcher managed access).

Table 3.3

*Sample Two*

Gender	Number	Percentage
Male	147	70%
Female	63	30%
Total	210	100%

Table3.4

*The total Sample Size from all the Faculties (Art and Human Science, Medicine, Engineering, Education, and Economy)*

Gender	Number	Percentage
Male	253	44%
Female	318	56%
Total	571	100%

### 3.6 Research Instruments

In the current study, two scales were used; the first questionnaire was adapted and customized from the rejection sensitivity questionnaire (RSQ) that was developed by Downey and Feldman (1996). The second questionnaire was adopted from the social anxiety questionnaire (SA) that was developed by Radwan (2001). The social anxiety questionnaire was used to test the criterion-related validity (concurrent validity) for the Y-RSQ. The process of adaptation and the psychometric proprieties are mentioned below.

#### 3.6.1 Rejection sensitivity questionnaire

This scale comprises 18 presumptive situations in which a person asks important others to make him or her prone to rejection. The respondents should select the degree of their agreement on a 6-point Likert scale with each situation. They illustrate (i) their level of anxiety on expectancy of rejection; range from (1, very unconcerned; to 6, very concerned) and (ii) their subjective possibility assesses that the individual(s) would actually respond positively in each situation to their request anticipation of acceptance; scale (1, very unlikely to 6, very likely) (Ayduk et al., 2008b). Their measure actualizes a two-level scale for every item, as it is standard for present measures of rejection sensitivity. Subscale one induces participants to rate how anxious they would be about the reaction to their request whereas subscale two asks

participants to rate their impression or comprehension of whether they anticipate that others will grant or reject their request. Both subscales are measured as constant (Slimowicz, 2011).

RS scores are acquired by weighting the anticipated probability of rejection by the level of concern that rejection would happen along with measuring both the anxious and expectant component that contains the rejection sensitivity handling dynamic. During the procedure of item development, it was demonstrated that outcomes along these two measurements did not co-vary efficiently. In other words, a few people may have been anxious making a request, however, did not anticipate rejection while others might not have been concerned about making the request but rather anticipated rejection; henceforth, only items that make variance along both dimensions were retained through the development of their measure (Slimowicz, 2011). Three scores could be obtained from the RSQ; the anxiety score (range 1 - 6), the anticipation of rejection score (range 1 - 6), and the general score of RS (the score of anxiety level x the reversed score of rejection expectancy [7 - expectancy of acceptance]). Scores can range from 1-36 (Rosenbach, 2014).

In the current study, the researcher has translated RSQ into formal Arabic language since the Arabic language is the official language in Yemen, and most people cannot understand English. Six situations that are related to dating (2, 4, 5, 12, 16, and 18 see Appendix A) have been replaced by other situations namely (13, 14, 15, 16, 17, and 18 see Appendix B) because their content is unsuitable for Yemeni culture, as dating is forbidden in Islam religion as well as in Yemeni customs. Furthermore, 3 situations (19, 20, 21 see Appendix B) have been added as on one hand, there are more specific situations that can make people sensitive to rejection in Yemeni culture and

on the other hand, to make the instrument valid for use in general life setting not only for a school setting. The final version of the adapted Y-RSQ consists of 21 items.

In situation six the phrase “would not mind” was excluded because it could cause confusion for the respondents and accordingly this misunderstanding could influence the selection of the answer’s options (very unlikely to very likely). In situation 11, the phrase “over spring break” has been modified to “on holidays” since there is no Spring break in Yemen, and to make it more applicable for a different life setting. Situation 10 “After graduation, you can’t find a job and ask your parents if you can live at home for a while” has been amended to “After graduation, you can’t find a job and ask your parents if they can give you money for while” because in Yemeni culture, young people have to stay with their families until they get married; besides that, in some families’ rules children have to stay with their families even after getting married. Situation 17 “you go to a party and notice someone on the other side of the room and then you asked them to dance” has been modified to “you go to a party and notice a group of people on the other side of the room and then you asked to join them” because according to Yemeni culture it is impolite to ask someone to dance with you unless they are close friends of the same gender and attending non-mixed parties (women and men have separated parties). In order to replace the six situations and add the three extra items, the researcher has distributed two open-ended questions to a sample of 15 students. The first question was “in your opinion, what are the situations in which a person may face rejection from others or situations that make others reject him/her)? The second question was “in your opinion, how other people would react or behave in such situations” Based on the students’ responses the researcher has transferred the situations that they mentioned into close-ended questions.



The translated version was submitted to two lecturers who are familiar with the content of the instrument and are also experts in English language to check the accuracy of the translation, make corrections to the spelling and grammatical mistakes as well as to check the content. Based on the English language experts' opinions, the required amendments have been made and the grammatical mistakes have been corrected. Then the researcher has handed the Y-RSQ to two experts in Arabic language to check the structure of the sentences; based on their comments (see Appendix C) the researcher made some changes to the structure of the sentences. In the final step, to gain a sense of how effective the translation was back-translation (Brislin, 1970) was used by asking another independent expert in English language to blindly translate the translated questionnaire back into the original language (English) to confirm the accuracy of the RSQ translation. Subsequently, a cultural adaptation of the final version was provided to the experts in psychology as well as in English and Arabic. Having confirmed the accuracy of the translation, the final version of Y-RSQ was ready (see Appendix D); therefore, the researcher has proceeded with the pilot study.

### 3.6.2 Social anxiety

The Social Anxiety (SA) questionnaire comprises 29 items; it was developed by Radwan (2001). The author of this questionnaire developed it by referring to reactions to social situations (RSS) developed by Sarason (1984) and tendency of self-attention questionnaire developed by Fenigstein (1986). SA questionnaire measures social anxiety using five components (i) physical symptoms of social anxiety, (ii) difficulty of communication and self-expression, (iii) fear of social situations and interactions to them, (iv) attention deficit or dispersion of ideas, (v) lack of self-confidence. The participants are requested to respond on a 4-point

Likert-typed scale 1 never, 2 often, 3 rarely, and 4 always. The scores of this scale range from (29-116) (see Appendix E) (Radwan, 2001).

### **3.7 Psychometric Properties of the Instruments**

Psychometric properties are the development and validation of assessment instruments and evaluating whether these instruments are reliable and valid forms of assessment. Psychometric properties are normally interested in measuring a person's learning, capacity, personality, and behaviors. Assessment commonly occurs as a form of surveys, and surveys must be assessed widely before having the capacity to state that they have excellent psychometric properties, which means an instrument is reliable and valid (Kadam & Chuan, 2016).

#### **3.7.1 Rejection sensitivity questionnaire**

The internal consistency coefficient (Cronbach's  $\alpha$ ) was reported to be .81, while test-retest reliability coefficients were .83 and .78 for 3 weeks and 4 months of retest intervals (Ritu. & Anand, 2016). The Turkish version of the RSQ was adapted by Erozkhan (2004), who reported the coefficient of internal consistency as  $\alpha = .81$  and test-retest reliability as .81. Whereas the parallel form validity of the questionnaire was examined through the interpersonal sensitivity measure (Boyce & Parker, 1989), the relationship coefficient was reported as .64 (Erozkhan, 2015). In their study, Staebler et al., (2011) reported that the internal consistency was ( $\alpha = .94$ ) and the test-retest reliability was excellent at .90. The German version of the RSQ was adapted by Rosenbach (2014) the internal consistency was  $\alpha = .89$ , test-retest reliability was .70 (Ayduk et al., 2008b; Rosenbach & Renneberg, 2011).

### 3.7.2 Social anxiety

Radwan (2001) tested the reliability of social anxiety (SA) scale by using three different methods, the first was test-retest after 6 weeks and the value was .74 which is considered good indexes for the reliability, the second method was Cronbach Alpha and the value was  $\alpha = .92$ . The third was split-half method and the reliability value was .82. He used criterion-related validity to test the validity of the Questionnaire and the result was reported as .81. Factor analysis indicated that there are five factors with eigenvalue more than one, and the 29 items were loaded with .40 loading.

### 3.8 Pilot Study

A pilot study was conducted in order to check the understanding of the adapted Y-RSQ language by administering the questionnaire to a sample of 40 participants to check their understanding of the questionnaire language. The participants were asked to comment on whether the items are well translated, or ambiguous, as well as to give their suggestions for further improvements. Based on the pilot study, participants commented that they could understand the items and the instructions of the questionnaire properly.

### 3.9 Reliability

Reliability, as indicated by Cronbach (1988), is the exactness or accuracy with which a measure in light of one sample of test tasks at one point in time indicates the performance in view of a various sample of a similar sort of tasks or at various points in time or both. Precision might be denoted by a reliability coefficient or by the degree that a person scores almost the same in reduplicated scores as stated by a high-reliability coefficient or by a low standard error of measurement. A test is seen as

reliable when different researchers can use it under constant circumstances, with constant outcomes. Reliability reflects replicability and consistency over time. Additionally, reliability indicates to what degree the test is free from measurement errors, as the fewer measurement errors happen the more reliable the test (Fraenkel & Wallen, 2003). The level of reliability of a set of scores is a vital consideration in instructive assessment and in the functional everyday utilization of tests. A score for a person on a test is acquired to judge a person and generally to take practical action in view of the outcome. This means that a researcher should dependably pay significant attention to develop or select the right instrument that has good validity and reliability for the decision and description that he intends to make (Jonas et al., 2014).

Joppe (2000) describes reliability as the degree to which results are stable after some time and an exact exemplification of the whole population under study is referred to as reliability and if the outcomes of a study can be reduplicated under the same technique, then the research tool is considered reliable (Golafshani, 2003). Essentially, Jan (2001) saw reliability as repeatability consistency, reproducibility, and dependability. He viewed that reliability is the level of stability or consistency of the measure acquired from the instrument, in case people have a tendency to keep up a similar order of legitimacy on each of two administrations of a test, meaning that a reliable instrument has a stable standard error of measurement (John, 2015).

Stanley and Hopkins (1982) stated that reduplicated sets of scores of a progression of objects or people would usually demonstrate some level of stability. This propensity towards stability from one set of scores to another is recognized as reliability. Reliability can be perceived or utilized as an accuracy of a set of scores or instruments in different ways such as (i) test-retest reliability (ii) parallel forms

reliability (iii) internal consistency reliability (iv) inter-rater or inter-observer reliability (John, 2015). In this study, reliability was tested using Cronbach Alpha.

### 3.9.1 Cronbach Alpha

This method is commonly used as an assessment of internal consistency of an instrument. It was developed by Lee Cronbach in 1951 as an expansion of the Kuder-Richardson equation (KR20). This method uses the variance of scores of odd, even and items total correlation to compute the reliability. Generally, the reliability coefficient of .70 or more is considered good and reliable (Nunnally & Bernstein, 1994). In this test, the average of all associations in all combinations of split-halves is determined. Instruments that have questions with more than two responses can be used in this test. Cronbach's alpha output is a number between 0 and 1 (Heale & Twycross, 2015).

### 3.10 Validity

Validity implies the scientific usefulness of a measuring instrument, extensively consistent regarding the extent to which any scale measures what it is designed to measure (Nunnally & Bernstein, 1994). Validity is considered a developing convoluted concept as it links to the implications of measurement outcomes. Concentrating on the consequences of the interpretations made infers that they would also be suitable. Messick (1989) denoted that these inferences are assumptions and validating these inferences amounts to hypothesis testing. Therefore, validity is considered as appraisal judgments that are made on the interpretations of measurement results or test scores about whether proper inferences are made as well as actions are taken based on these inferences. These appraisal judgments have to

be accurate and reflective of the truth. A measurement or test cannot be said to be valid, only the interpretations of the test (Messick, 1989).

A good validity argument combines different types of evidence to make a judgment to ascertain to what degree the existing evidence and theory support the intended explanations of scale scores for particular uses (Squires, Estabrooks, Newburn-Cook, & Gierl, 2011). In order to determine what qualities ought to be examined before distributing a test and to make cohesive recommendations, the APA committee thought that it was important to identify 3 types of validity, established by various types of research and requiring diverse interpretations. These three methods are content validity, criterion-related validity (predictive validity, concurrent validity), and construct validity (Cronbach & Meehl, 1955). In order to test the validity of the adapted Y-RSQ, three types of validity were used, namely content validity, concurrent validity and construct validity by utilizing confirmatory factor analysis.

### 3.10.1 **Content validity**

Content validity is the extent to which the items on a test represent the proposed variable instead of other related factors. This can be tested via painstakingly defining the variable, looking into relevant research and constructs, and working with specialists and additionally the target group to generate applicable or pertinent items (Hunt, 2015). The essential goal of expert judgment on constructed items is to test to what degree the constructed items are representative of the objective construct and the extent to which items reflect the facet of the construct that they were produced for and their pertinence (Delgado-Rico, Carretero-Dios, & Ruch, 2012). Nunnally (1978) demonstrated that a scale has content validity if it consists of a representative set of items and if plausible methods for questionnaire development are utilized. The

assessment of content validity regularly includes a systematic revision of the scale content to assure that it comprises all that it ought to and excludes anything not related to content. Content validity is not a scientific measure of instrument precision. However, it gives a strong foundation on which to construct a methodologically accurate assessment of a scale's validity (Lee, 2009 ).

As the literature review shows, the 18 hypothetical situations of RSQ are measuring the RS; however, the content validity for the adapted Y-RSQ has been investigated since the researcher has replaced six items and three extra items were added as mentioned previously. It was submitted to two experts in psychology, who were asked to evaluate whether all the situations measure rejection sensitivity, both of them agreed that all the items do measure the rejection sensitivity construct (see Appendix C).

### 3.10.2 Criterion-related validity

Criterion-related validity is used to decide the exactness of an estimation or instrument by contrasting it with another well-established measure or instrument. Fridenberg (1995) defined criterion-related validity as the capacity of a test to anticipate the performance of another measure. In the criterion-related validity method, the researchers are principally interested in some criterion which he wishes to anticipate. He administers the test and acquires an independent criterion measure on the same samples, then calculates the relationship. If the criterion is attained some time after the measure is administered, he is examining predictive validity. If the criterion scores and test scores are resolved at basically the same time, he is testing concurrent validity (Cronbach & Meehl, 1955). In the current study, the researcher investigated the concurrent validity.

### **3.10.2.1 Concurrent validity.**

Concurrent validity likewise assesses the relationship between the new measurement being tested and pre-existing one, utilized as an important criterion (Wijk, Brandsma, Dahlstrom, & Bjork, 2013). When a test is able to do the same job as some other tests, the concurrent validity is achieved and, in most cases, the new test will be utilized instead of the other tests. This method comprises determining the association between test scores and the scores of other established criteria. Concurrent validity was defined by Okoro (1994) as the degree to which performance in one activity can be used to expect performance in another activity taking place in the present at the same time (John, 2015). The measurements or scales are given to the same samples in the meantime so that both tests represent the same conditions. One issue that can be confronted when testing the concurrent validity is to find a criterion that achieves the highest quality level and is reliable and valid in itself (Wijk et al., 2013). To test the concurrent validity of the Y-RSQ, the researcher has used the social anxiety (SA) questionnaire as a criterion to check how far the Y-RSQ could correlate with SA among a sample of Yemeni students and confirm the validity of the Y-RSQ. If the Y-RSQ is highly and positively correlated with the measure of SA, the criterion-related validity evidence is achieved.

### **3.10.3 Construct validity**

Construct validity alludes to the latent variables' theoretical relationship with the latent factors of different scales. That is, the measure being constructed ought to associate with different measures that assess the same variable and it should not associate with irrelevant constructs or instruments (Hunt, 2015). Different methodologies might be utilized to establish the construct validity of dimension evaluations. Several studies have used the multitrait-multimethod matrix



approach. Construct validity can be assessed by utilizing Factorial Validity. A matrix of inter-correlations frequently indicated productive methods for dividing the construct into more significant parts, factor analysis being a helpful computational technique in such studies. Guilford (1948) has discussed the role of factor analysis in construct validation. He stated that the personnel psychologist wants to know why his tests are valid. He can run tests and useful standards in matrix and factor it to determine actual dimensions of human being personality. A factorial depiction is accurate and consistent; it is economical in clarification; it prompts the formation of perspicuous tests that can be joined to expect complex conducts. It is certain that these factors work as a construct. Eysenck, in his model investigation, goes further than Guilford and demonstrates that factoring can be utilized straightforwardly to test assumptions regarding the constructs. Variables could possibly be weighted with surplus content. Surely, when they are viewed as "actual dimensions" a lot of surplus content is inferred, and the interpreter must shoulder a considerable onus of confirmation. The alternative perspective is to consider factors as characterizing a working reference frame, situated in an appropriate way identified by all behaviors of a given type. Determining the most useful factors among a given matrix will depend to some extent on inclinations, generally, the best construct is the one around which we can generate the largest number of inferences, in the most direct form (Cronbach & Meehl, 1955). There are two types of factor analysis, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) (Thompson, 2004).

### **3.10.3.1 Exploratory factor analysis (EFA)**

Investigators use (EFA) when they have few thoughts regarding the phenomena of interests, and thusly, are uncertain of how factors would work opposite each other. To determine the group of unobserved variables that underlie the difficulty

of the observed variables, investigators use EFA as a fundamental method. The fundamental method implies that the extracted factor from an EFA analysis has to keep critical data obtained from the original information, for example, the covariance between individuals' variety and the construct of interest and other relevant constructs; whereas, superfluous as well as redundant information, and fuses resulted from measurement errors and sampling errors. Exploratory factor analysis is a method planned to help produce a new theory by investigating hidden components that result in a good explanation for the variance and the inter-correlations of the observed factors (Henson, 2006). This process also calculates how powerfully every single item maps on to each factor. "Factor loadings" range between -1.0 and +1.0 and could be explained as a correlation coefficient. These point out (a) the degree to which all items are linked to one or more distinctive factors, (b) how robustly each item is connected to each factor (and whether the item would be retained or removed within a factor) and (c) how much each factor or subgroup could explain variance in responses to items. Items with factor loadings  $\geq |.4|$  are considered as strongly connected to the underlying factor. It is essential to notice that common factor analysis presumes a normal distribution; the factor loading and the degree to which a factor could be easily explained will be affected by the items with high skewness distributions (Santor et al., 2011). The construct validity of the adapted Y-RSQ in this study was evaluated by using confirmatory factor analysis (CFA).

### **3.10.3.2 Confirmatory factor analysis**

Confirmatory Factor Analysis (CFA) is usually used to examine the implied factor framework of the information; they are assumed to have unique roles based on the objective of the given study. It is used to develop a theory or used to examine theory. CFA can also be used to test a current theory, it expects a previous

model of the fundamental framework of the construct of interest and confirms if this model fits the data satisfactorily (Bandalos, 1996). The association between the predicted CFA model and the observed data is evaluated in view of various fit statistics. Using those indicators, investigators determined whether their model reflects the data sufficiently by counseling accepted standards (for discussion on the standards for CFA model evaluation (Hu & Bentler, 1998; Kline, 2005; Marsh, Hau, & Wen, 2004). Since (i) the structural proportion of a full structural equation model includes relationship between latent variables, and (ii) the fundamental concern in working with a full SEM model is to assess how much these relations are valid, it is crucial that the assessment of each latent factor is psychometrically consistent. In this way, a fundamental initial step in the analysis of full latent variable models is to look at first for the validity of the estimation model before evaluating the structural model. Furthermore, CFA procedures are used as a part of examining the validity of the indicator factors. When it is perceived that the assessment model is working sufficiently, the researcher can then have more certainty in outcomes linked to the assessment of the hypothesized structural model (Byrne, 2010).

The standard values for the Analysis of Moment Structured (AMOS) output are as follows: Chi-square and Chi-square/df is the test of model inconsistency (it specifies the degree to which the data sample covariances) and is discordant with the hypothesis the value should not be statistically significant (implied covariances). Data that fit the model perfectly gives low chi-square values and Chi-square/df ratios with values of 2 or less. In other words, the higher the covariances, the larger the chi-square statistic, and the more robust the evidence against the null hypothesis that the data fits the model. The recommended range of RMSEA (Root Mean Square Error Approximation Index) acceptability is ( $< .05$  to  $.08$ ), CFI (Comparative Fit Index)

more than .92, and the critical ratio (C.R.) needs to be  $> \pm 1.96$ . The C.R. statistic is established by dividing an estimate by its standard error. In large samples, the C.R. might be pertained or related to the standard normal distribution. Therefore, C.R. value of 1.96 or greater (and  $-1.96$  and lower), shows bilateral significance at the accustomed 5% level. In SEM, for example in the program EQS, the C.R. assessment is sometimes referred to as the Wald test (Hox & Bechger, 2007).

AGFI (Adjusted Goodness of Fit Index) above .90 shows that data fit the model. PCFI (Parsimony Comparative Fit Index) values closer to 1 indicate that data fit model. AIC (discrepancy measure between the suggested model and observed covariances) AIC values closer to 0 indicate that data fit the model. Values greater than .95 for the PGI (Population Gamma Index) show that data fit the model. The values of APGI (Adjusted Population Gamma Index) above .95 imply that data fit the model. The values of NFI (Normal Fit Index) above .90 indicate that data fit the model. RFI (Relative Fit Index) must be  $\geq .95$ . Use `\rfi` in text macro to display RFI value in output path diagram. IFI (Incremental Fit Index) must be  $\geq .95$ . Use `\ifi` in text macro to show IFI value in output path diagram. TLI (Tucker-Lewis Coefficient) - must be  $\geq .95$ . Use `\tli` in text macro to display TFI value in output path diagram (Matsunaga, 2010). In Structural Equation Modeling, Average Variance Extracted (AVE) for each construct must go beyond the discrepancy due to measurement error for that construct (AVE should exceed .50), for the factor loadings and AVE should be higher than .5 (Fornell & Larcker, 1981).

The traditional method of structural equation modeling as commonly practiced in the behavioral and social sciences can be described as represented in Figure 3.1, first, presenting the theory if available. As represented in a path diagram, the structural

equations are perceived as a one-to-one representation of the theory. Second, selecting a sample, and obtaining measures on the sample. Followed this step, the model's parameters are estimated. The measurement model can be evaluated first in this step, followed by the structural model, or the full model can be assessed at once. This is followed by model's goodness-of-fit analysis then model adjustment if necessary. Generally, this stage is repeated when goodness-of-fit of model is tested and modified frequently until a decision is made that the model meets some standard of satisfactory fit. Once the model is considered to fit, a discussion of the findings follows (Kaplan, 2000).

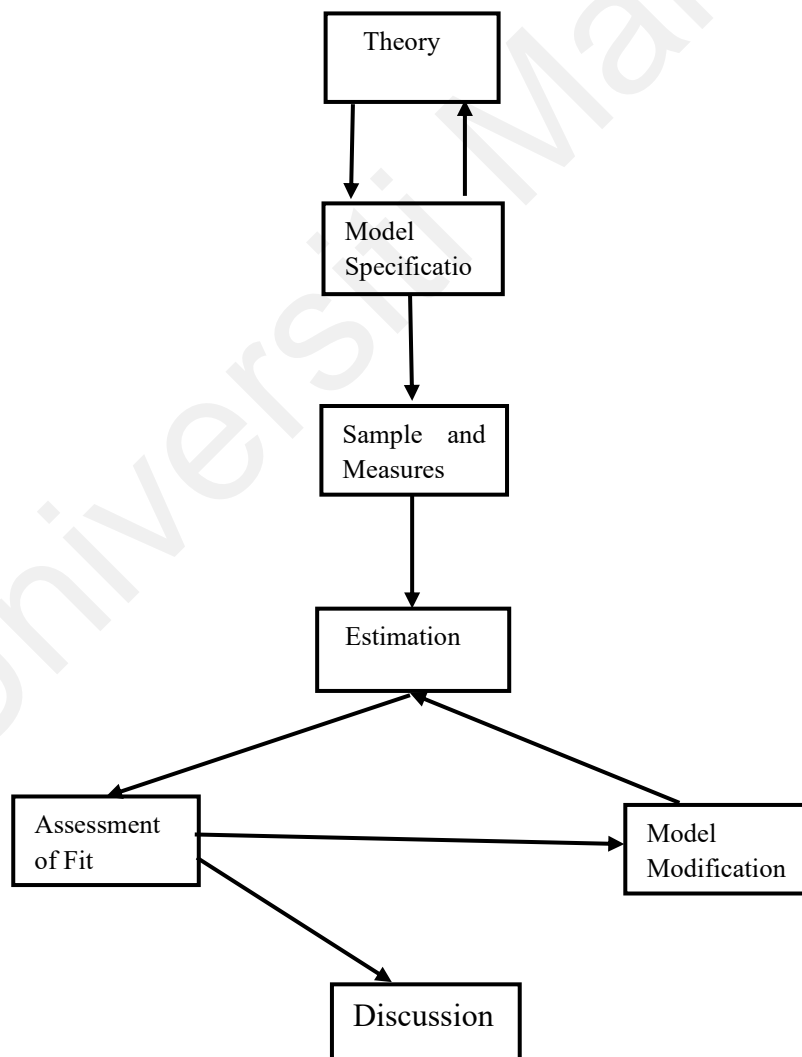


Figure 3.1. Diagram of convectional approach to structural equation model

### **3.11 Data Collection Procedures**

The questionnaires were distributed to the students from the Faculty of Art and Human Science which is the first sample. As aforementioned all the students had the opportunity to participate in this study, they were selected from the list of students' names in the faculty (every 18<sup>th</sup>). The names of the students who were selected were recorded then; the next step was to look for those students in their classes by referring to the timetable of each department. The objectives of the study were briefed to the lecturers and they were asked to give the researcher 20-25 minutes at the end of their classes to administer the questionnaires to those who had been selected from their classes. An explanation was provided to the students clarifying why only some of them had been selected. To preserve confidentiality, the questionnaires' package was anonymous and not marked or numbered in any way.

Each participant was given two questionnaires, respectively, the rejection sensitivity questionnaire (RSQ) and the social anxiety questionnaire (SA). Both questionnaires are self-administered, the researcher has provided instructions to inform students that there is no right, and wrong answer and also provided guidelines on how they should answer the items by indicating a score for the three different Likert-typed scales. The researcher has collected further data on May 2018 in order to increase the sample size and improve the inferior fit indices of the Y-RSQ, the administration of the questionnaires for the new sample was conducted via online Google Form as it was difficult to distribute the questionnaires face to face because semester two season 2017/2018 approached its end and students were preparing for their final exams. To distribute the Google Form to students, the researcher gained the permission to access the faculties' social media such as WhatsApp and Facebook groups and send the link to these groups and ask students to fill out the forms.

### 3.12 Data Analysis

Two software programs were used for data analysis; statistical package for social science (SPSS) and analysis of a moment structures (AMOS). SPSS was used to run the descriptive and inferential analysis. Normality of distribution was tested before proceeding with further analyses. For the second part of the analysis, the researcher used AMOS to run the factor analysis to identify factors that statistically explain the variance among rejection sensitivity construct measures. Cronbach Alpha was used to answer the first research question about the reliability. To answer research question two regarding the criterion-related validity, Pearson Predict Moment Correlation was used to find the correlation between rejection sensitivity questionnaire scores and social anxiety questionnaire scores. Factor analysis was performed on the 21 items to answer the third part of research question two about construct validity and research question three regarding whether the underlying factors of the Y-RSQ represent a one-factor model, a two-factor model, or a bifactor model. CFA was used for the sub-construct and the full model.

Table 3.5

*Research questions and method of data analysis for each question*

NO.	Research question	Data analysis method
RQ1	What is the reliability of the Y-RSQ?	Calculating Cronbach Alpha.
RQ2a	What is the content validity of the Y-RSQ?	Percentage of Experts' opinion.
RQ2b	What is the concurrent validity of the Y-RSQ?	Pearson Predict Moment Correlation.
RQ2c	What is the construct validity of the Y-RSQ?	CFA
RQ3	Do the underlying factors of Y-RSQ represent a one-factor correlated model, a two-factor correlated model, or a bifactor model.	CFA

### **3.13 Summary**

In this chapter, the researcher discussed research design and elaborated about quantitative research more specifically survey study, population, sample, and sampling method. The instruments that were used in this study namely rejection sensitivity questionnaire and social anxiety questionnaire were discussed starting from the process of adapting and translating rejection sensitivity. The reliability and validity methods that were used to validate rejection sensitivity were explained in detail in this chapter, namely data collection, and data analysis.

Universiti Malaysia



## CHAPTER 4

### FINDINGS

#### 4.1 Introduction

This study attempted to validate the rejection sensitivity questionnaire (RSQ) that was developed by Downey and Feldman (1996), in order to make it suitable for Yemeni culture as the USA version contains some items that are unsuitable for the Yemeni and Muslim culture. The data analysis was performed using the Statistical Package for the social science personal computer (SPSS) for Windows version 25 and several methods were employed to analyze the quantitative data collected by the questionnaires. This chapter comprises three major sections; the first section is descriptive statistics, the second is inferential statistics, and the third is factor analysis output. These analyses aimed to answer the following research questions:

- 1- What is the reliability of the adapted Y-RSQ?
- 2- What is the validity of the adapted Y-RSQ in terms of
  1. Content validity?
  2. Concurrent validity?
  3. Construct validity?
- 3- Do the underlying factors of the adapted Yemeni version of the rejection sensitivity questionnaire (Y-RSQ) represent a one-factor correlated model, a two-factor correlated model, or a bifactor model?

The first step in analyzing the data is to fulfill the assumptions needed in all the statistical tests that are used in this study. The most important assumption in processing an adequate and appropriate data for further analysis is the normality test assumption. Therefore, the preface of this chapter begins with the results of the normality tests.

## **4.2 Descriptive Statistics**

Descriptive statistics give a statistical summary of the data to give an extensive, reasonable and uncomplicated picture of a large quantity of data. Before proceeding with statistical analysis or tests such as correlation, it is essential to check whether the assumptions of these tests are met in the data set, which requires or includes the descriptive statistics on the variables such as mean, standard deviation and the descriptive statistics of the demographical variables (Bezuidenhout, 2011). In this section, the results of sample demographic data and the normality tests are presented in table form.

### **4.2.1 Sample's demographic data**

The sample of the current study were students of the Faculty of Art and Human Science at Sana'a University. In the first sample a total of 415 (126 males and 299 females) students returned the questionnaires out of 445 yielding a response rate of 93%. 54 questionnaires were discarded due to either non- responses for one of the scales, two answers for each item, or a set of responses. After the final check, sorting out, and numbering the responses only 361 were found to be complete (255 females and 106 males) and were used for the analysis. In the second sample a total of 210 (147 males and 63 females) out of 224 were included in the analysis and the remaining 10 cases were discarded as the respondents had left many items blank. The majority of the respondents in this study were female because the majority of the students who enroll in the faculty are females. Table 4.1 indicates the characteristics of the sample.

Table 4.1

*Demographic (Gender)*

	Frequency	Percent
Male	253	44.3
Female	318	55.7
Total	571	100.0

**4.2.2 Normality test**

Normal data refers to the bell-shaped distribution of data. The normality for a single indicator can be examined by two important statistical normality components namely skewness and kurtosis. The asymmetrical mean distribution shape refers to the skewness of a data distribution while the peak of that particular distribution refers to kurtosis. The pattern of responses is considered normal when both skewness and kurtosis are close to zero. The data were screened for outliers, normality, and missing data to prepare the data for inferential analysis. Normal multivariate assumed that all the constructs and subconstructs are in normal distribution, and the normal distribution is achieved if the skewness and the kurtosis values range of  $\pm 2$  (Gravetter & Wallnau, 2014; Trochim & Donnelly, 2006). Skewness and kurtosis were evaluated by using Weston and Gore's (2006) recommendation that absolute values greater than 3.0 on the skewness index and 1.0 on the kurtosis index are considered problematic.

The presence of a few high scores on RSQ among the sample did create a positively skewed result for the rejection sensitivity scores, but when they were removed as outliers (11 cases), the scores were found to be normally distributed. In order to discover whether the data is normally distributed or not, the ratio of skewness and kurtosis over their standard error (Z-score) should be within the ranges of -2.0 to

+2. The skewness Z-score value of rejection sensitivity is 1.32 whereas the kurtosis Z-score value is -1.59. These values are within the range of normal distribution. Kolmogorov-Smirnov is statistically insignificant at  $p > .05$  which indicates the normality assumption is held.

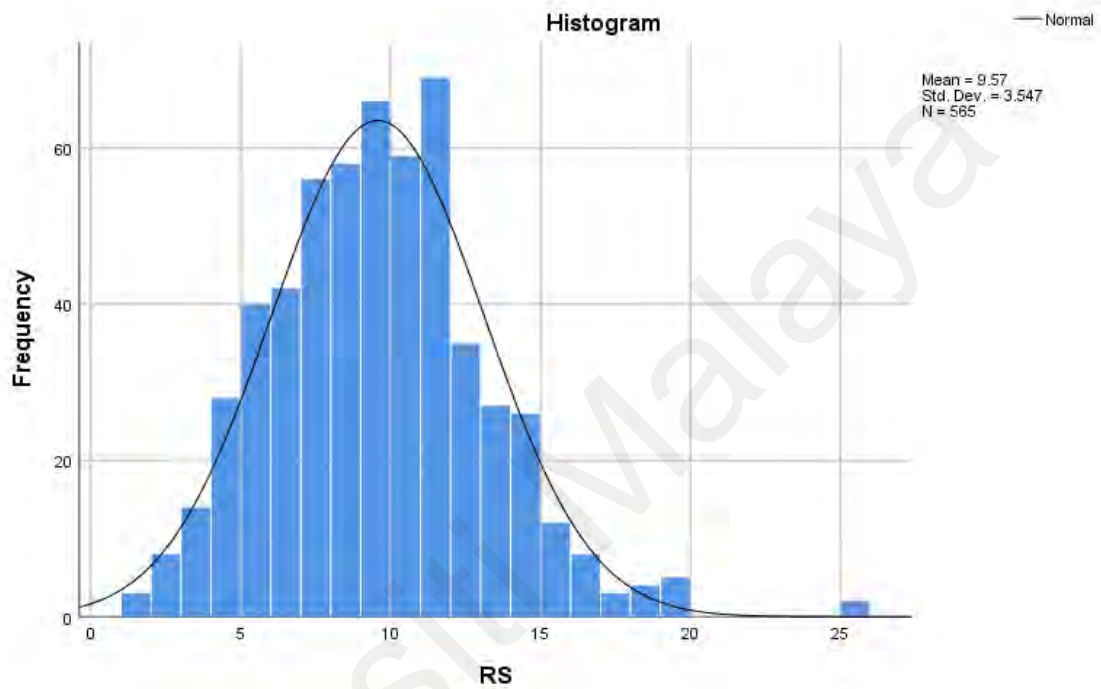


Figure 4.1. Histogram of the rejection sensitivity scores distribution

On the other hand, the skewness Z-score value of social anxiety is .64, while the Kurtosis Z-score value is -2.44. This value indicates the distribution is slightly flat. Kolmogorov-Smirnov is significant at  $p < .05$ . The distribution of the SA could still be considered normal and the assumption of normality is achieved as well for social anxiety as Z-score values are within the acceptable range.

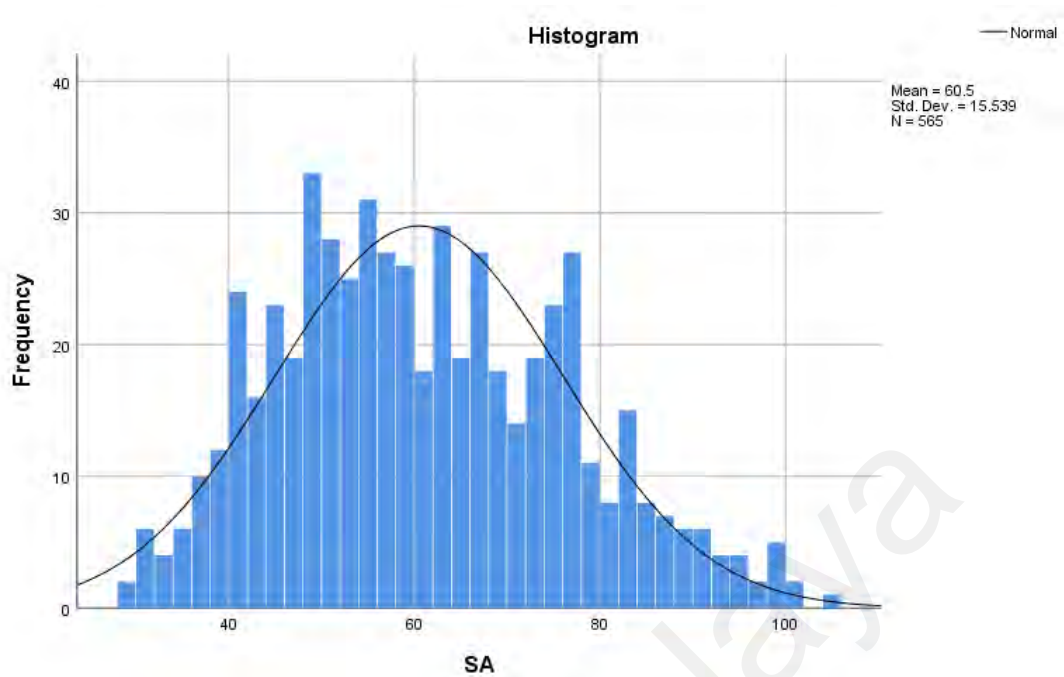


Figure 4.2. Histogram of the social anxiety scores distribution

Table 4.2

*Kolmogorov-Smirnova results for RS and SA*

	Statistic	df	Sig.
RS	.036	565	.086
SA	.061	565	.000

The standard deviation of social anxiety is spread out over a wider range of values compared to rejection sensitivity because SA is the fear of negative evaluation by others. It is external as it is focused on others' perspectives. SA is directly linked to social standards and role expectations, which are culture dependent. In addition, collectivistic countries also reported greater levels of social anxiety (Hofmann, Anu Asnaani, & Hinton, 2010). However, rejection sensitivity is the way people perceive and react to SR signs. It is internal as it depends on how people feel and perceive others' behavior.

Table 4.3

*Descriptive Statistics of Rejection Sensitivity and Social Anxiety for Male*

gender		RS	SA
male	Mean	9.34	57.46
	Std. Deviation	3.216	15.662
	Skewness	-.021	.615
	Kurtosis	-.480	-.165
	Std. Error of Skewness	.154	.154
	Std. Error of Kurtosis	.306	.306

Table 4.4

*Descriptive Statistics of Rejection Sensitivity and Social Anxiety for Female*

gender		RS	SA
female	Mean	9.75	62.94
	Std. Deviation	3.786	15.025
	Skewness	.696	.161
	Kurtosis	1.217	-.498
	Std. Error of Skewness	.138	.138
	Std. Error of Kurtosis	.274	.274

Table 4.5

*Descriptive Statistics of Rejection Sensitivity and Social Anxiety for the Whole Sample*

		RS	SA
Total sample	Mean	9.57	6.50
	Std. Deviation	3.547	15.539
	Skewness	.489	.336
	Kurtosis	.891	-.488
	Std. Error of Skewness	.103	.103
	Std. Error of Kurtosis	.205	.205

#### 4.2.3 Reliability of the Adapted Yemeni Version of Rejection Sensitivity Questionnaire

To answer research question one, “what is the reliability of the adapted Yemeni version of the rejection sensitivity questionnaire?”

Reliability analysis was performed after the validation analysis including the remaining 16 items from the confirmatory factor analysis. Reliability was performed on each of the subscales and the total scale of the Y-RSQ in order to ascertain the consistency of the construct by using Alpha Cronbach. Cronbach’s alpha coefficient is one of the most common methods to evaluate the internal consistency. Alpha could be interpreted as a correlation coefficient and it is a function of the mean association between items with each other. DeVellis (1991) indicated that the minimally acceptable  $\alpha$  values range between .65 and .70, values between .70 and .80 are considered good and values between .80 and .90 to be very good. Likewise, Hair, Black, Babin, Anderson, and Tatham (2006) suggested that items with an  $\alpha$  value of .70 and higher are adequate, though alpha coefficient of .60 may also be passable in explorative research (Bezuidenhout, 2011). The Cronbach alpha values for each of the rejection sensitivity subscales and the overall reliability are good; whereas, rejection anxiety Cronbach’s  $\alpha = .78$ , the rejection expectancy Cronbach’s  $\alpha = .82$ , and the overall reliability Cronbach’s  $\alpha = .82$  see Table 4.6. These coefficients suggest that the total scale score displays adequate internal consistency for research purposes (Funk, 2004).

Table 4.6

*Reliability Analysis for the Y-RSQ*

Factors	Cronbach alpha	Number of items
Rejection Anxiety	.78	16
Rejection Expectancy	.82	16
Overall reliability	.82	32

As shown in the table above, the Cronbach alpha coefficients ranged from .78 to .82 for the sample (N= 571) and can be considered very good. The item statistics for the Y-RSQ are presented in Tables 4.7, 4.8, and 4.9.

Table 4.7

*Item-Total Statistics for Rejection Anxiety Questionnaire*

Items	Mean	Std. Deviation	Corrected Item-Total Correlation
RA2	2.18	1.624	.277
RA3	2.85	1.785	.415
RA5	3.18	1.678	.316
RA6	2.15	1.551	.255
RA7	3.36	1.943	.388
RA8	2.16	1.450	.359
RA9	2.73	1.616	.486
RA10	2.64	1.744	.373
RA11	3.38	1.758	.446
RA12	3.44	1.745	.374
RA13	3.63	1.793	.398
RA15	3.27	1.793	.322
RA16	2.46	1.740	.385
RA19	2.56	1.722	.391
RA20	2.96	1.789	.364
RA21	2.46	1.676	.437



Table 4.8  
*Item-Total Statistic for Rejection Expectancy Scale*

Items	Mean	Std. Deviation	Corrected Item-Total Correlation
RE2	2.16	1.769	.469
RE3	2.29	1.727	.479
RE5	2.90	1.619	.425
RE6	2.95	1.754	.453
RE7	2.73	1.748	.429
RE8	2.58	1.652	.525
RE9	3.01	1.601	.469
RE10	2.81	1.749	.461
RE11	3.09	1.568	.391
RE12	3.45	1.598	.370
RE13	3.48	1.608	.278
RE15	3.54	1.617	.318
RE16	2.56	1.730	.509
RE19	3.00	1.855	.368
RE20	3.36	1.763	.337
RE21	2.67	1.689	.490

Table 4.9  
*Item-Total Statistics for the Whole Scale*

Items	Mean	Std. Deviation	Corrected Item-Total Correlation
RA2	2.18	1.624	.271
RE2	2.16	1.769	.297
RA3	2.85	1.785	.345
RE3	2.29	1.727	.324
RA5	3.18	1.678	.214
RE5	2.90	1.619	.309
RA6	2.15	1.551	.238
RE6	2.95	1.754	.318

Table 4.10 (continue)

Table 4.911 (continue)

Items	Mean	Std. Deviation	Corrected Correlation	Item-Total
RA7	3.36	1.943	.283	
RE7	2.73	1.748	.334	
RA8	2.16	1.450	.295	
RE8	2.58	1.652	.375	
RA9	2.73	1.616	.365	
RE9	3.01	1.601	.379	
RA10	2.64	1.744	.286	
RE10	2.81	1.749	.355	
RA11	3.38	1.758	.267	
RE11	3.09	1.568	.311	
RA12	3.44	1.745	.257	
RE12	3.45	1.598	.342	
RA13	3.63	1.793	.235	
RE13	3.48	1.608	.279	
RA15	3.27	1.793	.230	
RE15	3.54	1.617	.305	
RA16	2.46	1.740	.308	
RE16	2.56	1.730	.402	
RA19	2.56	1.722	.341	
RE19	3.00	1.855	.339	
RA20	2.96	1.789	.314	
RE20	3.36	1.763	.343	
RA21	2.46	1.676	.407	
RE21	2.67	1.689	.388	

The item means range from 2.16 to 3.63. No items could be identified to result in a significant increase in the reliability values if items deleted. The item analysis indicated that all the items can be retained. The subscales have a satisfactory reliability and met the criteria of the reliability. Corrected item-total correlation coefficients indicate the correlation of an item with the total scale as shown in tables above, some

items (RA2, RA5, RA6, RA7, RA8, RA10, RA11, RA12, RA13, RE13, RA15) have item-total correlation .2 and above. According to Streiner and Norman (2003), corrected item-total correlation coefficients imply the relationship of an item with the overall scale when that item is excluded. Literature suggests values above 0.2 demonstrate a good level of correlation (Matta, Azeredo, & Luiza, 2016). Range of inter-item correlations between .15 and .85 indicates a criterion for good scale (BrckaLorenz, Chiang, & Nelson Laird, 2013). There are no standard guidelines for interpreting these values; however, values below .20 may suggest that an item is problematic (Hathcoat, Sanders, & Gregg, 2016). According to Kline (1999), the recommended level of the corrected item-total correlations is above the of 0.2 (He, Wang, & Wang, 2012). Hence, the item-total correlation scores for all the 16 items are higher than .2 and so all the items are retained. On the other hand, Cronbach alpha for social anxiety in the current study was  $\alpha=.92$  which indicated high reliability, item statistics are reported in Table 4.1.

Table 4.1012

*Item-Total Statistics for Social Anxiety*

Items	Mean	Std. Deviation	Corrected Item-Total Correlation
SA1	2.11	.861	.534
SA2	2.37	.901	.390
SA3	1.60	.904	.420
SA4	1.87	.943	.527
SA5	2.34	.920	.540
SA6	2.08	.945	.449
SA7	2.16	.975	.574
SA8	2.12	.900	.523
SA9	1.87	.904	.622

Table 4.130 (continue)

Items	Mean	Std. Deviation	Corrected Correlation	Item-Total
SA10	2.15	.978	.560	
SA11	2.83	1.017	.370	
SA12	2.03	.995	.468	
SA13	2.04	.996	.608	
SA14	2.07	1.004	.637	
SA15	1.76	.940	.550	
SA16	2.24	.934	.588	
SA17	1.56	.854	.518	
SA18	2.05	.973	.492	
SA19	1.55	.869	.470	
SA20	2.08	.935	.510	
SA21	2.61	.996	.477	
SA22	2.36	1.110	.419	
SA23	1.96	.924	.548	
SA24	2.43	1.002	.547	
SA25	2.23	.977	.555	
SA26	1.79	.944	.526	
SA27	2.19	1.048	.460	
SA28	1.68	.900	.615	
SA29	2.36	1.025	.526	

### 4.3 Validity of the Adapted Yemeni Version of Rejection Sensitivity Questionnaire

For the purpose of answering research question two, “what is the validity of the adapted Yemeni questionnaire in terms of content, concurrent, and construct validity?”

validity was evaluated via three methods and the results of each method are stated below.

#### 4.3.1 Content validity

Using this method, the experts were provided with a number of questionnaire items and they were asked to determine individualistically whether the aspects of rejection sensitivity (RS) are measured by the underlying items, in other words, whether these items are suitable or not suitable to measure RS construct. However, there were no indexes established for content validity, alternatively, items were revised by going through two steps. First, a group of four experts was selected to conduct the initial validation and check or revise the questionnaire relevancy. The Y-RSQ contained 21 items with two different Likert scales and the judges had to indicate the accuracy of the translation. Based on their comments indicating which items should be rewritten and which items were not clear, another (more refined) version of the Y-RSQ was submitted to two experts in psychology who are bilingual in Arabic and English for further content validation to check whether each item was (a) suitable or (b) unsuitable to measure RS and which items could be discarded. Based on the first round and the second round of review, items were rewritten and refined, and no items were deleted. 21 items were included in the final version of the Yemeni version of RSQ measure see Appendix D.

#### 4.3.2 Concurrent validity

Inferential statistics were used to answer part (b) of the second research question, “what is the concurrent validity of the adapted Y-RSQ?” The researcher has calculated the correlation coefficient between the scores of the RS questionnaire and social anxiety questionnaire by using Pearson product-moment correlation ( $r$ ). According to Havlicek and Peterson (1976), the sampling distributions of ( $r$ ) are not sensitive to the effects of nonnormality. The effect of violations of the basic assumptions of normality and type of scale has little effect upon the distributions of

(*r*) and the likelihood is that these statements would be fairly precise. The result of the correlation coefficient is presented in the table below.

Table 4.141

*Correlation Between Rejection Sensitivity and Social Anxiety*

		SA	RS
SA	Pearson Correlation	1	.502**
	Sig. (2-tailed)		.000
	N	354	354
RS	Pearson Correlation	.502**	1
	Sig. (2-tailed)	.000	
	N	354	354

\*\* . Correlation is significant at the .01 level (2-tailed).

As shown in Table 4.11 there is a statistically significant positive relationship between RS and SA ( $r = .50, p < .01$ ). The correlation between RSQ and SA measures considered moderate correlation according to (Taylor, 1990), which implied that the concurrent validity is achieved as there is a relationship between the two variables. The sub-factors (rejection anxiety and rejection expectancy) were significantly and positively correlated with each other ( $r = .23, p < .00$ ). This relationship is considered weak as indicated by Taylor (1990).

Table 4.152

*Correlation Between Rejection Anxiety and Rejection Expectancy*

		RA	RE
RA	Pearson Correlation	1	.253**
	Sig. (2-tailed)		.000
	N	354	354
RE	Pearson Correlation	.253**	1
	Sig. (2-tailed)	.000	
	N	354	354

\*\* . Correlation is significant at the .01 level (2-tailed).

### 4.3.3 Construct validity

As most of the items were taken from the original questionnaire EFA was not conducted, the researcher has followed the same number of factors that were reported in Downey and Feldman's study (1996). To check the construct validity researcher has used Confirmatory Factor Analysis (CFA). CFA is one of the structural equation modeling techniques used to determine the goodness of fit between the speculated model and the data. This technique verifies the factor structure of a set of observed variables and their fundamental latent constructs. The analysis of moment structure (AMOS) was used to conduct CFA. The CFA is intended to answer the two following research questions:

- 1- What is the construct validity of the adapted Yemeni version of RSQ?
- 2- Do the underlying factors of the adapted Yemeni version of RSQ represent a one-factor correlated model or a two-factor correlated model, or a bifactor model?

The present study explored the factor structure (i.e., grouping of individual items/subscales) of Y-RSQ via factor analyses in an attempt to assess whether the original factor structure described by Downey and her colleagues (1996) was replicated with this current sample. Previous findings of the Downey and Feldman's study (1996) interpreted their results in favor of the unidimensionality of the RSQ; however, the current study aimed to confirm whether the adapted Y-RSQ represents a one-factor model as some changes have been done to the original questionnaire. The researcher has run the analysis first for the one-factor correlated model, second for the two-factor correlated model, and finally for the bifactor model. The results are illustrated in the next paragraph.

#### 4.3.3.1 Model fit and measurement model assessment of rejection sensitivity

Commonly, chi-square measures are used to assess the discrepancy in fit between the data and the hypothesized model, a good model fit gives a non-significant  $p$ -value. Nevertheless, the goodness-of-fit statistics for chi-square most of the time produce significant chi-square values because of the detection of unimportant variation in large sample sizes, so extra fit indexes were also examined. Based on the commendations of Hu and Bentler (1998, 1999), the model fit for both samples were gauged using a combination of fit indexes using empirically derived cutoff scores. Precisely, a good fit is indicated by  $RMSEA \leq .06$ ,  $SRMR \leq .08$ , and the CFI ranges from 0 to 1. Higher values indicate better model fit (Themessl-Huber, 2014),  $CFI \geq .95$  (Zawilinski, 2011). CIMN value is 2 or as high as 5 to indicate a reasonable fit (Marsh & Hocevar, 1985).

According to Fan and Sivo (2007), some studies recommend that the model size (as defined by the number of observed variables) ought to be a concern in assessing the performance of the fit indices. The data of this study were analyzed using structural equation modeling in AMOS with a sample of 361 respondents then with a sample of 210 and finally the two samples were combined, and the analysis was run for the total sample ( $N= 571$ ). The analysis plan involved three steps summarized here first and then presented in detail in the next section. The first step RS model was tested as a one-factor model. Second, the RS model was tested as a two-factor model. Third, the RS model was tested as a bifactor-model. Unfortunately, the results of the three phases of the analyses indicated acceptable model fit for the Y-RSQ without being excellent (Ding, Velicer, & Harlow, 1995; Maulana & Rufaidah, 2014; Moss, Lawson,



& White, 2015; Shevlina, Milesb, & Lewisa, 2000), even though items with factor loading lower than .3 have been deleted see Table 4.13.

Table 4.163

*Fit Statistics for Rejection Sensitivity Model Sample Size (n=361)*

Measure	CIMN	Probability	GFI	AGFI	RMSEA	SRMR
One-factor model	3.292	.000	.803	.773	.080	.077
Two-factor model	3.477	.000	.809	.778	.084	.078
Bifactor model	3.415	.000	.840	.795	.082	.086

In addition, allowing errors to correlate did not improve the acceptable model fit indices (Ding et al., 1995; Maulana & Rufaidah, 2014; Shevlina et al., 2000) which led the researcher to recollect data in order to improve the fit indices. The new data set that was achieved from the new sample was analyzed separately in three phases as the first sample. The second round of the analysis was conducted by using a subsample (n= 210); however, the results indicated acceptable RS model fit indices (Ding et al., 1995; Maulana & Rufaidah, 2014; Shevlina et al., 2000) see Table 4.14.

Table 4.174

*Fit Statistics for Rejection Sensitivity Model Using the Subsample (n=210)*

Measure	CIMN	Probability	GFI	AGFI	RMSEA	SRMR
One-factor model	1.838	.000	.759	.732	.064	.077
Two-factor model	1.838	.000	.759	.732	.064	.077
Bifactor model	1.681	.000	.808	.771	.057	.065

The one-model and two-factor model of RS achieved the same results but the bifactor model was higher. Although the researcher in the second round of the analysis has deleted items with factor loadings lower than .30 and allowed some of the errors with high scores to correlate an acceptable model fit still resulted. Therefore, the final step of the analysis was run by combining the first sample with the second sample and the results are reported in Table 4.15.

Table 4.185

*Fit Statistics for Rejection Sensitivity Model When Combined the First Sample with the Second Sample (N=571)*

Measure	CIMN	Probability	GFI	AGFI	RMSEA	SRMR
One-factor model	3.615	.000	.843	.821	.068	.068
Two-factor model	3.615	.000	.843	.821	.068	.066
Bifactor model	3.371	.000	.863	.833	.066	.065

The one-factor model, two-factor model, and bifactor model did not fit perfectly as shown in the tables above. In some cases, poor fit results from items similarly phrased or appearing adjacent to each other. Accordingly, modification indexes were inspected to identify if fit could be improved by allowing some error terms to correlate (Lee, 2016). Eight errors were allowed to correlate to check whether the fit indices would improve, the output was relatively close or comparable to what has been presented in Table 4.11. The third phase of the analysis for the total sample is presented in detail below.

To answer the third research question “Do the underlying factors of the adapted Yemeni version of RSQ represent a one-factor correlated model, a two-factor

correlated model, or a bifactor model?” the researcher has compared the values of the fit indices for the three suggested models and the details are presented below.

#### 4.3.3.2 Measurement model assessment of rejection sensitivity one-factors correlated model

Fit statistics for the RS one-factor correlated model were (Chi-square  $\chi^2(463) = 1673.713, p < .001$ , GFI = .843, AGFI = .821, RMSEA = .068. The value of CMIN/DF is 3.615,  $p < .001$ ). Some of the indices such as GFI and AGFI are closer to the minimum acceptable range of model fit .80 (Maulana & Rufaidah, 2014; Shevlina et al., 2000). CMIN/DF = 3.615 a value of CMIN/DF < 3 indicates an acceptable fit between hypothetical model and sample data (Kline, 1998) and CMIN/DF < 5 demonstrating a reasonable fit (Marsh & Hocevar, 1985). SRMR value is .066, a value of SRMR less than .08 is mostly considered a good fit (Hu & Bentler, 1999). CFI and TLI did not meet the expected fit index cutoffs (Hu & Bentler, 1998). Whereas, the factor loadings for items 1, 2, 4, 6, and 17 were lower than .3 the minimum acceptable range for factor loading according to Tabachnick and Fidell (2007) and Brown (2014a), so these items were discarded. The factor loadings of the one-factor correlated model for the 16 items are presented in Table 4.16 and 4.17.

Table 4.196

*Regression Weights One-Factor Correlated Model of Rejection Sensitivity: (Group Number 1 - Default Model)*

			Estimate	S.E.	C.R.	P	Label
RA3	<---	RA	.863	.115	7.526	***	par_1
RA5	<---	RA	.686	.103	6.657	***	par_2
RA7	<---	RA	.932	.125	7.483	***	par_3
RA8	<---	RA	.594	.089	6.669	***	par_4
RA9	<---	RA	1.037	.115	8.989	***	par_5

Table 4.1620 (continue)

			Estimate	S.E.	C.R.	P	Label
RA10	<---	RA	.799	.110	7.241	***	par_6
RA11	<---	RA	1.102	.124	8.868	***	par_7
RA12	<---	RA	.884	.114	7.767	***	par_8
RA13	<---	RA	1.000				
RA14	<---	RA	.831	.115	7.222	***	par_9
RA15	<---	RA	.828	.114	7.282	***	par_10
RA16	<---	RA	.877	.113	7.739	***	par_11
RA18	<---	RA	.707	.117	6.042	***	par_12
RA19	<---	RA	.862	.112	7.706	***	par_13
RA20	<---	RA	.865	.115	7.525	***	par_14
RA21	<---	RA	.930	.113	8.246	***	par_15
RA13	<---	RA	1.000				
RA14	<---	RA	.831	.115	7.222	***	par_9
RA15	<---	RA	.828	.114	7.282	***	par_10
RA16	<---	RA	.877	.113	7.739	***	par_11
RA18	<---	RA	.707	.117	6.042	***	par_12
RA19	<---	RA	.862	.112	7.706	***	par_13
RA20	<---	RA	.865	.115	7.525	***	par_14
RA21	<---	RA	.930	.113	8.246	***	par_15
RA13	<---	RA	1.000				
RA14	<---	RA	.831	.115	7.222	***	par_9
RA15	<---	RA	.828	.114	7.282	***	par_10
RE16	<---	RE	1.704	.238	7.174	***	par_26
RE18	<---	RE	1.450	.220	6.578	***	par_27
RE19	<---	RE	1.320	.211	6.268	***	par_28
RE20	<---	RE	1.182	.194	6.080	***	par_29
RE21	<---	RE	1.594	.225	7.068	***	par_30

Table 4.17

*Standardized Regression Weights One-Factor Correlated Model of Rejection Sensitivity: (Group Number 1 - Default Model)*

			Estimate
RA3	<---	RA	.425
RA5	<---	RA	.359
RA7	<---	RA	.421
RA8	<---	RA	.360
RA9	<---	RA	.564
RA10	<---	RA	.402
RA11	<---	RA	.551
RA12	<---	RA	.445
RA13	<---	RA	.490
RA14	<---	RA	.401
RA15	<---	RA	.406
RA16	<---	RA	.443
RA18	<---	RA	.317
RA19	<---	RA	.440
RA20	<---	RA	.425
RA21	<---	RA	.488
RE3	<---	RE	.478
RE5	<---	RE	.468
RE7	<---	RE	.464
RE8	<---	RE	.578
RE9	<---	RE	.530
RE10	<---	RE	.509
RE11	<---	RE	.457
RE12	<---	RE	.402
RE13	<---	RE	.334
RE14	<---	RE	.417
RE15	<---	RE	.359
RE16	<---	RE	.571
RE18	<---	RE	.457
RE19	<---	RE	.413
RE20	<---	RE	.389

Table 4.17 (continue)

RE21	<---	RE	.547
------	------	----	------

Standardized factor loadings obtained with the one-factor correlated model of RSQ items on their intended subscales are presented in Table 4.17 above. The loadings on the subscales in the one-factor correlated model were all statistically significant (at  $p < .05$ ) and ranged in magnitude from .317 to .578.

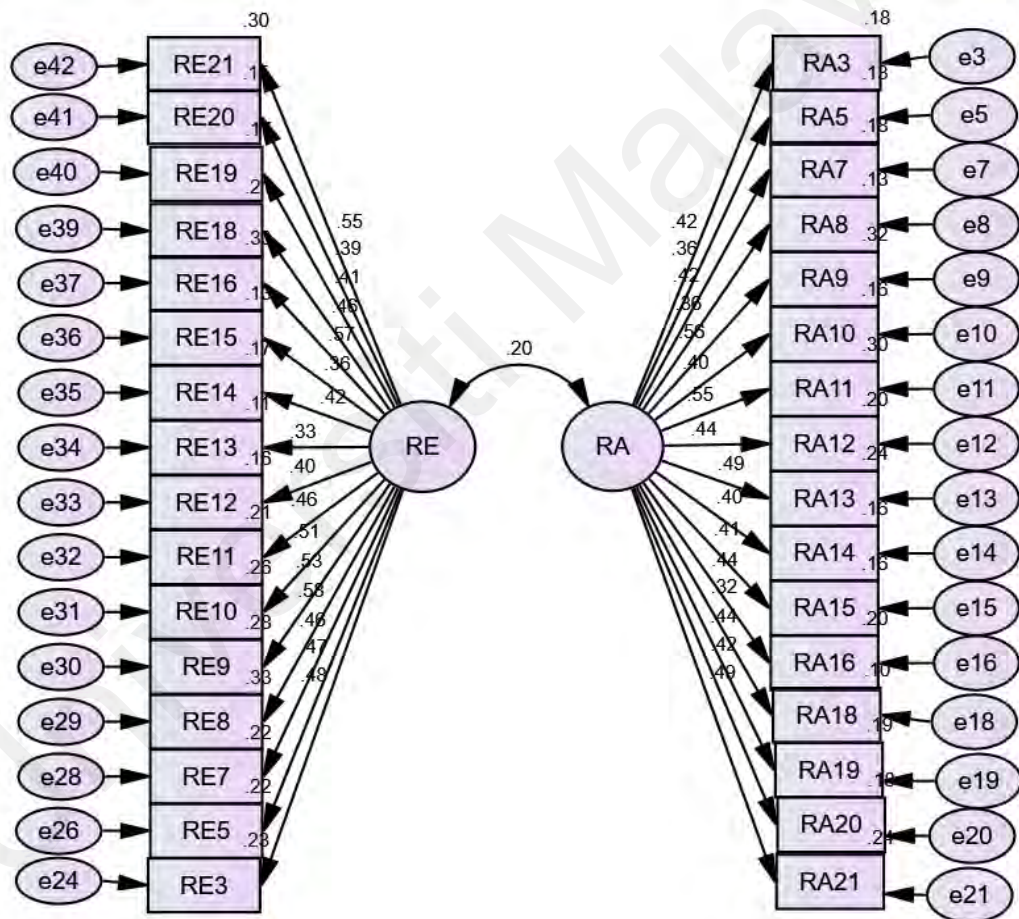


Figure 4.3. One-factor correlated Model of Rejection Sensitivity

### 4.3.3.3 Measurement model assessment of rejection sensitivity two-factor model

Fit statistics for the rejection sensitivity two-factor model are exactly similar to the one-factor model. Chi-square  $\chi^2(463) = 1673.713, p < .001$ , GFI = .843, AGFI = .821, RMSEA = .068. The value of CMIN/DF is also 3.615,  $p < .001$ , SRMR = .066. As aforementioned indices like GFI and AGFI are close to the acceptable minimum score .80 (Maulana & Rufaidah, 2014; Shevlina et al., 2000). While CFI and TLI did not meet the expected fit index cutoffs (Hu & Bentler, 1998). Standardized factor loadings obtained with the two-factor model of RSQ items on their intended subscales are presented in Table 4.18 and 4.19. The loadings of the subscales in the two-factor model were all statistically significant (at  $p < .001$ ) and ranged in magnitude from .317 to .578. The factor loadings for items 1, 2, 4, 6, and 17 were lower than .3 the minimum acceptable range of factor loading (Brown, 2014a), so the four items were deleted.

Table 4.18

*Regression Weights Two Factor Model of Rejection Sensitivity: (Group Number 1 - Default Model)*

			Estimate	S.E.	C.R.	P	Label
RA	<---	RS	1.000				
RE	<---	RS	1.000				
RA3	<---	RA	1.258	.201	6.250	***	par_1
RA5	<---	RA	1.000				
RA7	<---	RA	1.358	.218	6.225	***	par_2
RA8	<---	RA	.866	.151	5.733	***	par_3
RA9	<---	RA	1.511	.215	7.015	***	par_4
RA10	<---	RA	1.164	.191	6.084	***	par_5
RA11	<---	RA	1.605	.231	6.957	***	par_6
RA12	<---	RA	1.288	.202	6.386	***	par_7
RA13	<---	RA	1.457	.219	6.657	***	par_8

Table 4.18 (continue)

			Estimate	S.E.	C.R.	P	Label
RA14	<---	RA	1.211	.199	6.073	***	par_9
RA15	<---	RA	1.206	.197	6.108	***	par_10
RA16	<---	RA	1.278	.201	6.370	***	par_11
RA18	<---	RA	1.031	.194	5.319	***	par_12
RA19	<---	RA	1.256	.198	6.352	***	par_13
RA20	<---	RA	1.261	.202	6.249	***	par_14
RA21	<---	RA	1.356	.204	6.644	***	par_15
RE21	<---	RE	1.000				
RE20	<---	RE	.742	.098	7.556	***	par_16
RE19	<---	RE	.828	.104	7.925	***	par_17
RE18	<---	RE	.909	.106	8.582	***	par_18
RE16	<---	RE	1.069	.106	1.052	***	par_19
RE15	<---	RE	.627	.089	7.068	***	par_20
RE14	<---	RE	.748	.094	7.982	***	par_21
RE13	<---	RE	.581	.087	6.648	***	par_22
RE12	<---	RE	.695	.090	7.762	***	par_23
RE11	<---	RE	.775	.090	8.578	***	par_24
RE10	<---	RE	.962	.104	9.278	***	par_25
RE9	<---	RE	.917	.096	9.545	***	par_26
RE8	<---	RE	1.032	.102	1.122	***	par_27
RE7	<---	RE	.877	.101	8.675	***	par_28
RE5	<---	RE	.820	.094	8.736	***	par_29
RE3	<---	RE	.893	.101	8.875	***	par_30

Table 4.19

*Standardized Regression Weights Two-Factor Model of Rejection Sensitivity: (Group Number 1 - Default Model)*

			Estimate
RA	<---	RS	.552
RE	<---	RS	.360
RA3	<---	RA	.425



Table 4.19 (continue)

			Estimate
RA5	<---	RA	.359
RA7	<---	RA	.421
RA8	<---	RA	.360
RA9	<---	RA	.564
RA10	<---	RA	.402
RA11	<---	RA	.551
RA12	<---	RA	.445
RA13	<---	RA	.490
RA14	<---	RA	.401
RA15	<---	RA	.406
RA16	<---	RA	.443
RA18	<---	RA	.317
RA19	<---	RA	.440
RA20	<---	RA	.425
RA21	<---	RA	.488
RE21	<---	RE	.547
RE20	<---	RE	.389
RE19	<---	RE	.413
RE18	<---	RE	.457
RE16	<---	RE	.571
RE15	<---	RE	.359
RE14	<---	RE	.417
RE13	<---	RE	.334
RE12	<---	RE	.402
RE11	<---	RE	.457
RE10	<---	RE	.509
RE9	<---	RE	.530
RE8	<---	RE	.578
RE7	<---	RE	.464
RE5	<---	RE	.468

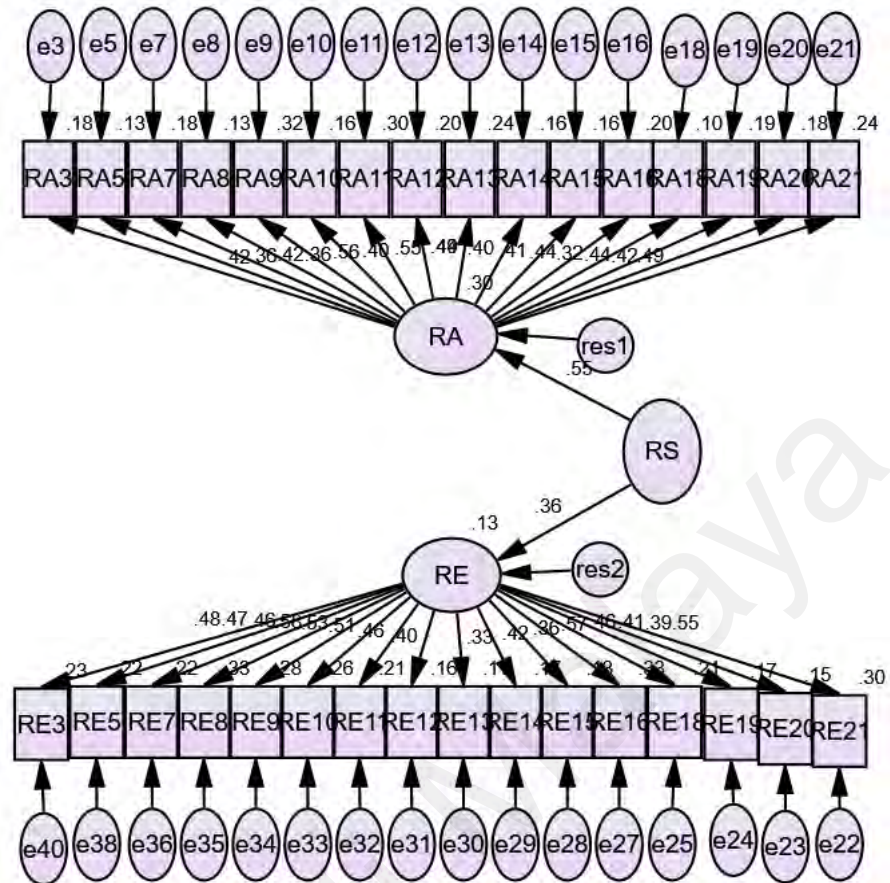


Figure 4.4. two-factor model of rejection sensitivity

#### 4.3.3.4 Measurement model assessment of rejection sensitivity

##### bifactor model

A bifactor measurement model for a given responses for a set of items, indicates that the correlations between these items could be explained by (a) a general factor exemplifying the common discrepancy between all the items and (b) a set of group factors where the discrepancy is shared between the general factor and the subsets of items that are supposed to be largely similar in content. Frequently presumed, as well, is that the general factor and group factors are orthogonal. The general factor represents the comprehensive fundamental construct intended to be measured by an instrument, while group factors represent more conceptually particular subdomain constructs. Substantively, bifactor models mainly have been used to (a)

examine the partitioning of variance when it is believed that an instrument evaluates both general and group sources of variance, (b) control for multidimensionality, such that the measure is “essentially unidimensional” but with troubling dimensions, (c) determine whether multidimensional item response data have a robust sufficient general factor to justify a unidimensional measurement model, and (d) judge the sufficiency of a total score and what one may obtain through scoring subscales (Rodriguez, Reise, & Haviland, 2016).

Fit statistics for the bifactor RS model are as follow, Chi-square  $\chi^2(432) = 1456.184, p < .001$ , GFI = .863, AGFI = .833, RMSEA = .065. The value of CMIN/DF is 3.371,  $p < .001$ , SRMR = .065. The GFI and AGFI indices are close to the acceptable minimum score .80 (Maulana & Rufaidah, 2014; Shevlina et al., 2000). Although CFI and TLI did not meet the expected fit index cutoffs (Hu & Bentler, 1998). Although these indices do not adhere to Hu and Bentler’s (1999) rule of thumb for good approximate fit, SRMR < .08 and (CFI > .95 or RMSEA < .06), it does demonstrate mediocre approximate fit by their standards and therefore provides moderate support for Y-RSQ as stated in Page (2007). In general, “the fit indexes that were obtained indicating overall acceptability but without being an excellent fit” (Moss et al., 2015, p. 6).

Table 4.20

*Regression Weights Bifactor Model of Rejection Sensitivity: (Group Number 1 - Default Model)*

			Estimate	S.E.	C.R.	P	Label
RE2	<---	RE	1.346	.238	5.657	***	par_1
RE3	<---	RE	1.335	.236	5.667	***	par_2
RE5	<---	RE	1.213	.189	6.435	***	par_3
RE6	<---	RE	1.374	.212	6.494	***	par_4
RE7	<---	RE	1.239	.210	5.894	***	par_5
RE8	<---	RE	1.502	.218	6.879	***	par_6
RE9	<---	RE	1.433	.195	7.338	***	par_7
RE10	<---	RE	1.393	.215	6.465	***	par_8
RE11	<---	RE	1.209	.172	7.020	***	par_9
RE12	<---	RE	1.241	.172	7.227	***	par_10
RE13	<---	RE	1.000				
RE15	<---	RE	.977	.160	6.117	***	par_11
RE16	<---	RE	1.559	.220	7.077	***	par_12
RE19	<---	RE	1.163	.196	5.931	***	par_13
RE20	<---	RE	1.113	.177	6.304	***	par_14
RE21	<---	RE	1.393	.211	6.610	***	par_15
RA2	<---	RA	.652	.097	6.702	***	par_16
RA3	<---	RA	1.003	.115	8.686	***	par_17
RA5	<---	RA	.677	.099	6.830	***	par_18
RA6	<---	RA	.530	.090	5.878	***	par_19
RA7	<---	RA	.974	.121	8.064	***	par_20
RA8	<---	RA	.667	.088	7.542	***	par_21
RA9	<---	RA	1.000				
RA10	<---	RA	.915	.111	8.272	***	par_22
RA11	<---	RA	.967	.109	8.891	***	par_23
RA12	<---	RA	.762	.101	7.544	***	par_24
RA13	<---	RA	.850	.106	8.023	***	par_25
RA15	<---	RA	.713	.105	6.777	***	par_26
RA16	<---	RA	.849	.107	7.953	***	par_27
RA19	<---	RA	.883	.108	8.186	***	par_28
RA20	<---	RA	.806	.107	7.531	***	par_29

Table 4.20 (continue)

			Estimate	S.E.	C.R.	P	Label
RA21	<---	RA	.950	.108	8.839	***	par_30

The loadings of the subscales were all statistically significant (at  $p < .001$ ) and ranged in magnitude from .321 to .553. The factor loadings for items 1,4, 14, 17, and 18 were lower than .3 so the five items were deleted. The standardized factor loadings attained with the bifactor model of RSQ items on their proposed subscales are presented in Table 4.21.

Table 4.21

*Standardized Regression Weights Bifactor Model of Rejection Sensitivity: (Group Number 1 - Default Model)*

			Estimate
RE2	<---	RE	.469
RE3	<---	RE	.476
RE5	<---	RE	.461
RE6	<---	RE	.482
RE7	<---	RE	.436
RE8	<---	RE	.560
RE9	<---	RE	.551
RE10	<---	RE	.490
RE11	<---	RE	.475
RE12	<---	RE	.478
RE13	<---	RE	.383
RE15	<---	RE	.372
RE16	<---	RE	.555
RE19	<---	RE	.386
RE20	<---	RE	.389
RE21	<---	RE	.508
RA2	<---	RA	.353
RA3	<---	RA	.494

Table 4.21 (continue)

			Estimate
RA5	<---	RA	.355
RA6	<---	RA	.301
RA7	<---	RA	.441
RA8	<---	RA	.404
RA9	<---	RA	.544
RA10	<---	RA	.461
RA11	<---	RA	.483
RA12	<---	RA	.384
RA13	<---	RA	.417
RA15	<---	RA	.350
RA16	<---	RA	.429
RA19	<---	RA	.451
RA20	<---	RA	.396
RA21	<---	RA	.498

### Bifactor model of rejection sensitivity

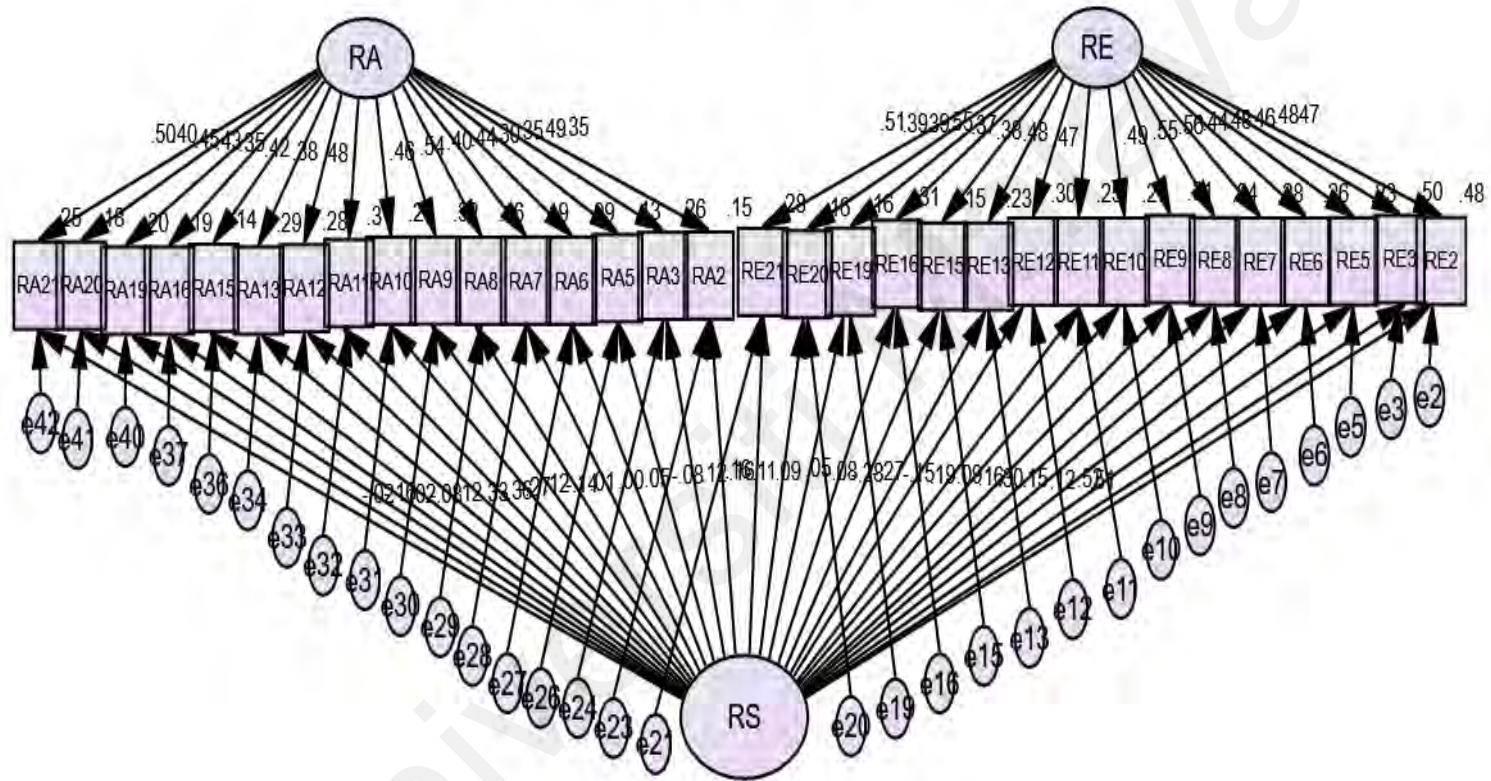


Figure 4.5. Bifactor model of rejection sensitivity

The table below provides a summary of the bifactor results in the first sample, second sample, and the combined sample.

Table 4.22

*Summary of bifactor results in the first, second and total sample*

First sample					Second sample					Combined sample				
CIM	GFI	AGFI	RMS	SRM	CIM	GFI	AGFI	RMS	SRM	CIM	GFI	AGFI	RMS	SRM
3.415	.840	.795	.082	.086	1.681	.808	.771	.057	.065	3.371	.863	.833	.065	.066

#### 4.3.3.5 Measurement model assessment of rejection sensitivity bifactor model after correlating errors

A total of eight errors were allowed to correlate to improve the model fit; however, the results remained relatively close to what is presented above in all the three phases of the models. Results of this phase of analysis are reported in the table below.

Table 4.23

*Fit Statistics for Rejection Sensitivity Model with correlating Errors*

Measure	CIMN	Probability	GFI	AGFI	RMSEA	SRMR
One-factor model	2.520	.000	.883	.865	.052	.056
Two-factor model	2.520	.000	.883	.865	.052	.056
Bifactor model	2.314	.000	.891	.867	.050	.055



#### 4.4 Summary

Overall, the outcomes of this study revealed that the measurement properties (reliability and validity) of the observed and latent variables were at acceptable levels. In applied research, factor loadings higher than or equal to .30 or .40 are often interpreted as salient; that is, the indicator is meaningfully related to a primary or secondary factor (Timothy, 2006). Tabachnick and Fidell (2007) suggested that factor loadings of .32 or above are considered meaningful, and Comrey and Lee (1992) suggested loadings of .55 and above are good because it means that roughly 30% of the variance in the item is accounted for by the factor (Neff, Whittaker, & Karl, 2017). Using these criteria, the large majority of items have acceptable factor loadings on their subscale factors in the one-factor model, two-factor model, and bifactor model. In addition, the result of the one-factor model and the two-factor model are similar but the outcome of the bifactor model is higher. The fit indices that were obtained in this study indicates overall acceptability but without being an excellent fit.

## CHAPTER 5

### DISCUSSION AND CONCLUSION

#### 5.1 Summary of the Findings

The purpose of the present study is to validate the rejection sensitivity questionnaire (RSQ) to be usable in the Yemeni culture, furthermore, to measure the reliability, validity, and utility of the RSQ with an adult population. The existing data about mental health denoted that many people in Yemen are suffering from adverse emotional well-being and psychosocial consequences. Civil war and conflicts in Yemen have led to the increment in the number of patients with anxiety and depression and other types of psychological disorders. These psychological disorders were reported in the literature to be positively correlated with RS. The nature of this association between the different kinds of psychological disorders and RS urges the need to provide a suitable measure to test RS among Yemeni people. The findings are summarized below.

- 1- The Y-RSQ is found to have good reliability, the overall Cronbach Alpha is .82.
- 2- The Y-RSQ has good content validity.
- 3- There is a criterion-related validity for the Y-RSQ hence Y-RSQ correlated moderately with the measure of social anxiety.
- 4- The Y-RSQ has an acceptable construct validity all items have a factor loading of .3 and above.
- 5- Y-RSQ model could be represented as a bifactor model which includes a general factor (rejection sensitivity) and two groups of factors (rejection anxiety and rejection expectancy). Even though the values of the fit indices for the other

suggested models of RS are comparable and there is no great difference between them, the bifactor showed higher fit indexes.

## **5.2 Discussion of the Findings**

The purpose of developing RSQ was intended to use it to measure people's concerns and anxious expectancy about whether close people will dismiss or acknowledge them (Olson, 2013). The results of the study provide further support for rejection sensitivity theory; in their latest outline on RS, Downey and her colleagues look at RS as a protectively stimulating system that outcomes from early experiences of rejection (Romero-Canyas et al., 2010a). In Downey and her colleagues' primary study intended to set up the uniqueness of the construct RS and identify it from other personality manners, they describe rejection sensitive individuals as the individuals who anxiously expect rejection and promptly see it as intentional or deliberate (Olson, 2013). Accordingly, the researcher has tried to validate the RSQ on a sample of Yemeni students to provide a solid measure that can be used to measure rejection sensitivity among Yemeni undergraduate students. In this section the findings of each research question are discussed and related to previous studies.

This study provides an instrument that is empirically based and appears to be a reliable and valid questionnaire. The process and methodology used for adaptation and validation of the Y-RSQ and the psychometric properties of the Y-RSQ were thoroughly studied and analyzed. The analyses of the factorial validity test for the Y-RSQ were conducted (using CFA) and reliability analysis (using corrected item-total correlation). The final version of the Y-RSQ consists of 16 items. A total of 5 items out of 21 items were deleted from the scale because of the low factor loadings (items 1, 4, 14, 17, and 18). These items were removed or discarded with the purpose of

increasing the homogeneity of the items on the scale, increasing reliability, as well as increasing confidence in the constancy of the scale. As for the first research question about the reliability of the Y-RSQ, the researcher first runs the validity analyses (confirmatory factor analysis for the construct validity and predict moment Pearson (r) correlation for the criterion-related validity). Based on the results of validity analyses, items with low factor loadings were deleted. Then the second step was running the reliability analysis for the remaining items (16) items because a valid instrument is always reliable but a reliable instrument does not necessarily mean it is a valid one, in other words, for a test to be reliable, it also needs to be valid (Wilson, 2014).

The findings of this study are consistent with prior studies and indicate that the Y-RSQ is a reliable measure since Cronbach Alpha values are very good and the item-total correlation for each item is within the acceptable range. This result is backed and supported by past studies (e.g., Erozkhan, 2009; Innamorati et al., 2014). Previous research that used RSQ reported an internal consistency coefficient (Cronbach's  $\alpha$ ) of .83, and test-retest reliability coefficients of .83 and .78 for 3 weeks and 4 months retest intervals. The output of the current study indicates a good inter-item correlation for the subscales individually and for the general factor, the values of Cronbach Alpha for Y-RSQ among the Yemeni sample range from .78 to .82. In general, 67% of the variances were explained by these factors. To determine the degree to which every item on the scale is able to assess the properties that it intends to measure, researcher calculated the corrected-item total correlation coefficient values. The corrected item-total correlation values between each item of the scale and total scores ranged between .214 and .407, indicating an adequate homogeneity of the Y-RSQ. Therefore, it can be said that each item in the Y-RSQ serves the objective of measuring rejection sensitivity

that it supposes to measure at a significant level with the overall scale (Pallant, 2007; Ba lci, 2009).

The value of Cronbach Alpha in this study is comparable to the reliability coefficients that were reported in the literature review using different samples from different cultures such as (Bergevin, 2003; Chaudoir, Vergara-Lopez, & Stroud, 2017; Downey et al., 2000; Erozkhan, 2009; Innamorati et al., 2014; Kraines et al., 2018; Tuskeviciute, 2017). As the internal consistency for a group of factors and the general factor was adequate as shown by alpha coefficients ranging from .78 to .82, the Y-RSQ total scores were somewhat capable of well capturing the specific latent variable they intended to test.

The second research question sought to assess the validity of the Y-RSQ and each of its items among a sample of undergraduate students. The evidence supporting the use of the RSQ among the adult population in Yemen or any other Arab country is unavailable to the researcher's knowledge, and data on the validity of this questionnaire is yet limited to foreign countries. Thus, investigation of the construct validity of the Y-RSQ was the major aim of the present research. Three different methods were used to check the validity of the Y-RSQ. The first method was content validity which is considered a significant source of validity evidence; it is crucial to identify the construct being assessed. The content validity was justified by first, attempting to include a representative sample of items (to replace items that are unsuitable for Yemeni culture) through reviewing the literature on rejection sensitivity and amending formerly developed statements designed to capture conceptual use of rejection sensitivity with undergraduate students in the Yemeni context. Secondly,

assessing the relevance of the items and the content of the Y-RSQ by referring to a panel of experts in the field of psychology.

The result of this method supported the content validity of the Y-RSQ. The panel of experts evaluated the appropriateness of the Y-RSQ as well as the items of each subconstruct of Y-RSQ for measuring rejection sensitivity. The experts agreed that the Y-RSQ is an appropriate measure for rejection sensitivity and the selected items for the subconstructs, in general, were appropriate; therefore, content validity at this level was considered satisfactory. This result indicated that content validity is good and consistent with some of the past studies (e.g., Khoshkam, Bahrami et al. 2012; Erozkhan, 2004; Innamorati et al., 2014) in which they confirmed and followed the same subconstructs or factors and the same items with few modifications according to the culture; as well as, the experts who judged the content validity supported the scale content and denoted that all the items are measuring the construct of RS. This finding is also consistent with the result of Downey and Feldman (1996) in which they developed and validated the RSQ on a sample of university students in the US. With the purpose of validating the concept of RS, they examined the notion that anxious anticipation of rejection increases the person's differences in comprehending intended rejection in people's obscure behavior. The measure of RSQ was developed on the basis of the hypothesis that in situations when people voice their personal needs to important others in their life these situations will probably provoke concern regarding rejection and acknowledgment, hence their RS score would be identified by their level of anxiety. Therefore, anxious anticipations of being rejected in circumstances that produce the likelihood of rejection by valued others are considered the essence of the RS model.

The criterion-related validity method was used as a second method to evaluate the validity of the Y-RSQ by correlating the Y-RSQ with another criterion which is social anxiety (SA). The analyses implied that the measure of RSQ was significantly and positively correlated with the measure of SA which means the criterion-related validity for the Y-RSQ is achieved since both measures of the two variables correlated significantly. The significant positive relationship between Y-RSQ and the measure of SA provides strong evidence of criterion-related validity. This finding is supported by the theory purports, RS people have a predisposition to anxiously or angrily perceive, expect and overreact to rejection. It follows, then, that these individuals may exhibit social anxiety/withdrawal when they perceive interpersonal rejection (Edwards, 2014).

This result was not surprising as previous research has shown a strong and positive relationship to exist between RS and SA both in young and older adolescents (Tsirgielis, 2015). This result also supports the result of Mor and Inbar (2009) in which RS was significantly, positively, and moderately correlated with SA,  $r = .45$  which means only 20% of the variances were explained by the correlation between RS and SA while in the current study  $r = .50$  meaning that 25% of the variances were explained by the relationship between RS and SA and the remaining 75% might be explained by other factors other than social anxiety. This mediocre relationship might be due to the culture bias, the method of sampling that was used in this study (not pure random sampling), and lack of variety among respondents.

Some studies show the association among RA and SA. RA, that is, interpretation, anticipation, and inappropriate response to rejection is one of the most important problems connected with social interactions is rejection sensitivity, that is, perception, expectation, and excessive reaction to rejection. People who experience

RS easily interpret ambiguous interpersonal situations as a rejection by others and reflect negative reactions to real or imagined feelings (Molavi, Mikaeili, Ghaseminejad, Kazemi, & Pourdonya, 2018). A review of the literature suggests many similarities between RS and SA (Ayduk et al., 2000; Clark & McManus, 2002; Feldman & Downey, 1994; Freitas & Downey, 1998; Heinrichs & Hofmann, 2001; Hirsch & Clark, 2004; Sandstrom et al., 2003). Both constructs disrupt cognitive and affective processing and cause emotional symptoms such as loneliness, SA, depression, hostility, and dejection, among others (Tsirgielis, 2015). Downey and Feldman (1996) indicated that the perception of rejection almost always produces emotional distress including social anxiety. This study is consistent also with several non-clinical studies that showed a positive correlation between RS and SA symptoms (London et al., 2007; McCarty et al., 2007; McDonald et al., 2010).

This would be consistent with expectations as well since SA and RS both measure the amount an individual's behavior may be influenced by social interaction. Individuals who experience SA often believe there is an evaluative component to any social interaction, typically interpreted as a negative one, regardless of the reality of this belief and expect that it may be harmful to them personally (Leitenberg, 1990). More recent research has divided SA into two forms first anxiety from being observed or evaluated poorly and second anxiety from interacting with others (Mattick & Clarke, 1998). Otherwise, rejection is a significant element to social development; we often experience various forms of SR on more than one occasion on a regular basis. SR typically does not impede individuals, but for those who are susceptible to these responses, SR can result in debilitating anxiety (Downey et al., 1994; Feldman & Downey, 1994).



Furthermore, RS was formerly described from a cognitive-affective, information processing framework (Downey & Feldman, 1996) because RS is related to anxiety. Individuals who would be described as rejection-sensitive will often alter their behavior to minimize the possibility of rejection, whereas, SA and RS do differ. Social anxiety is related to self-presentation and self-doubts about one's abilities in certain social situations, while RS is characterized by dysfunctional interpersonal relationships from the perspective of the relational self (Pachankis et al., 2008). Both constructs exist within a social frame, so they share similar qualities, such as social interaction as well as a fear of a negative outcome, whether it is a negative evaluation as in SA or a rejection as in RS.

In this study, RA was correlated positively and significantly with RE though the relationship is weak. However, this result is inconsistent with the result of the original validation study, where the scores on the anxiety and expectations questions were uncorrelated (Olsson et al., 2013). There is evidence that in terms of predictive utility RS was not redundant with established personality constructs to which it is theoretically and empirically correlated including social anxiety (Ayduk et al., 1999).

Construct validity was used as a third method to determine the validity of the Y-RSQ by using confirmatory factor analysis. When researchers investigate construct validity, they mainly aim to make sure that all the inferences they made about the results of measurement are meaningful and serve the purpose of the measurement (De Bruin, 2010). Confirmatory factor analysis revealed that the Y-RSQ has an acceptable model fit although some of the model fit indices that were achieved in the current study do not adhere to the thumb rule of Hu and Bentler's (1999) for good estimated fit,  $SRMR < .08$  and  $CFI > .95$  or  $RMSEA < .06$ ; it shows a satisfactory approximate fit

to their standards and therefore provides reasonable support for the Y-RSQ as indicated by (Page, 2007). In addition, allowing the errors to correlate in all the three suggested models does not improve the model fit in the current study which might be due to the lack of variety in the responses. The majority of the items (16 out of 21) has loaded significantly at .3 eigenvalue and above. The factor loading is comparable to that which has been stated in the literature (e.g., Downey & Feldman, 1996; Innamorati et al., 2014) in which all the items loaded at .30 and above.

The use of factor analysis in determining the structure of the underlying construct supports the initial work of Downey and Feldman (1996). The findings of confirmatory factor analysis provide insight into the construct validity of Y-RSQ that might be influenced by culture bias. The Y-RSQ achieved an acceptable score, however, it was not able to capture the real state of RS among Yemeni people, which might be due to the sample size as well as the credibility of respondents' answers or due to culture bias. Furthermore, it might be due to that many people in Yemen don't understand the importance of scientific research and the impact of the credibility of their answers on the results of study. Besides the dominance of old beliefs and customs on many segments of society who are afraid to cooperate with researchers, especially in the area of field research, or the prevalent beliefs of most subjects who represent the public opinion, that their views included in any scientific research are not important (Aziz & Bouzghaia, 2019). As a result, some of the students selected the extreme ends of the Likert scale or give set of responses which indicated that they overlook the content of the instruments. Having lower fit indices than the standardized cutoff scores for the Y-RSQ might be interpreted due to culture differences since Yemeni people and Arabs, in general, tend to be more collectivist due to Islamic teaching and Arab traditions that have group loyalty, respect for family members, helping and remaining

humble while interacting with others. This might be attributed also to the appealing picture that people try to draw for themselves in front of others; therefore, they do not give genuine answers for each situation. Noticing some of the student's responses showed that some of the respondents tried to show indifference in case the others in the scenario did not fulfill their request.

Additionally, a number of students selected the extreme ends of the Likert scales for both RA and RE which result in a lack of adversity in their responses. For example, in some cases, respondents selected option one for the RA and accordingly selected option one for the RE though it may not indicate their true feelings or expectations of rejection for some situations. Responses were not systematically covering among these two subconstructs. For instance, some individuals would be concerned to ask their parents to go with them to an important occasion but would not assume their parents would turn them down. Other individuals with the same level of concern would anticipate their parents to reject. Of the theoretical interest of Downey and her colleagues were individuals who both anticipated rejection and were anxious about this result in different personal situations (Downey & Feldman, 1996).

Moreover, it is seldom to get normal distribution for psychological data so particularly researchers are concerned about selecting an adequate estimation and testing method when the observed variables are not multivariate normally distributed. The ML method can be inadequate, however, because it is developed under the multivariate normality assumptions, which is usually violated in practice. ML estimations have been found to be quite robust to the violation of normality. That is the estimations are good estimates, even when the data are not normally distributed (Chou & Bentler, 1995).

With respect to the third research question about whether the underlying factors of the adapted Y-RSQ represent a one-factor correlated model, a two-factor model, or a bifactor model. First, researcher examined the Y-RSQ dimensionality, contrasting the original one-factor model examined by Downey and Feldman (1996) in the original study with two alternative models (a two-factor model and a bifactor model). Furthermore, Innamorati et al. (2014) indicated that the one-factor model presumes that RE and RA contribute equally to the final score of RS. The two-factor model (contrasted to the one-factor model) has the advantage of testing the assumption that RS scores can be obtained from weighting the anticipated possibility of rejection and the degree of anxiety over its existence for each situation. Likewise, relative to the one-factor model, the bifactor model supposes the presence of a general factor explaining the covariance shared by all items and two specific factors explaining the covariance of single groups of items (groups of items evaluating either expectancy of rejection or anxiety of potential rejection in each situation).

In the current study, the general factor and the two specific factors of the bifactor model were isolated. All the measurement items achieved significant factor loadings on the general factor, which was analogous to the other two models. Moreover, factor loadings for items on both specific factors (rejection anxiety and rejection expectancy) were significant. The results of this study show that all the fit indexes for the three suggested models of Y-RSQ are comparable though the bifactor fit indices are higher. This study supports the finding of Innamorati et al. (2014), who validated the extracted version of the adult RSQ on a sample of Italian students. They stated that the bifactor model had acceptable fit to the data and RS was best represented by a general factor and two groups of factors. Alternatively, Downey and Feldman (1996) interpreted their results in favor of the unidimensionality of the questionnaire,

although the analyses resulted in some factor loadings in the range of .30 – .40, suggesting less homogeneity of content. In both the Yemeni sample and the Italian sample, RS was best explained by a bifactor model unlike in the USA's which might be due to culture differences as the USA's culture is more accommodating because it is a multiracial country. People there tend to be open-minded in order to be able to communicate with each other regardless of their ethnicity.

The findings of the confirmatory factor analysis including the three phases of rejection sensitivity model related to student's perception, expectations, and reactions to rejection suggest that the three models can be modified for future studies, in order to improve the model's fit. Considering the analysis of the modification indices, the researcher tried to correlate errors; however, the results remained close to what has been reported. This result is inconsistent with the results of Lee (2016) in which he examined the modification indices to identify if fit could be improved by allowing some error terms to correlate. He pointed out that the RSQ model-fit indices improved when he allowed four error terms to correlate and reach an acceptable model fit. In this study, the only change that has been done is deletion of the items with low factor loadings in order to improve the model fit.

One of the most important points that should be highlighted is that the structure of the Y-RSQ is in the form of situations and each situation is measured by two different Likert scales which makes it difficult to discarded items with low factor loadings because in some Y-RSQ situations the measure of RA obtained low factor loading while the measure of RE achieved an acceptable factor loading and vice versa. Since each situation must be evaluated by the two scales, it was difficult to delete one of the scales and leave the other one; therefore, the items were completely removed

even though one of their scales scored acceptable factor loading. In sum, the results of this study indicate that the Y-RSQ is a reliable measure of the anxious expectations of rejection component of rejection sensitivity.

### **5.3 Contribution of study**

To the researcher's knowledge, no previous study has investigated rejection sensitivity among Yemenis and Arabs also there is no study that has carried out the psychometric properties of the rejection sensitivity questionnaire in Yemeni culture or Arab culture. Therefore, this study would be valued in that it is able to address the lack of studies on rejection sensitivity in Yemeni culture by establishing a reliable and valid scale to measure rejection sensitivity among university students and even among adults in general. In order to address this gap, the researcher has adopted the rejection sensitivity questionnaire and made some changes to the original version by deleting some items and replacing them with items that are more suitable for the Yemeni context. The reliability coefficient (Cronbach's Alpha) and concurrent and construct validity results supported the Y-RSQ as a reliable and valid instrument. The main contribution of this study is that it provides counselors, psychologists, and scholars with a tool that can help them measure rejection sensitivity among Yemenis as well as providing them with a comprehensive literature review about rejection sensitivity. Therefore, future studies can use this instrument and this comprehensive literature to conduct further investigations on rejection sensitivity and other variables related to it.

### **5.4 Implication of the Study**

Research implications essentially refer to the effect that one's study may have on future study or the relevant field of interest of one's study or policy decision. "How will research affect the targeted community or subject field?" is the question that research implications will answer. In the current study, the researcher has endeavored

to answer the three research questions related to the adaptation and validation of the rejection sensitivity questionnaire. The implications of the study are drawn from the results of the current study in order to be available as source for future studies related to rejection sensitivity and social anxiety. Therefore, it is important to bear in mind that generalization of the implications of this study might not be applicable to undergraduate students from different universities and different governorates. The implications of the study are divided into theoretical implications and practical implications:

#### **5.4.1 Theoretical implications**

Theoretical implication reflects how one's research supports or contradicts previous research results and theories or whether it creates something completely new. The responses on the Y-RSQ in the current study indicated that there is an impressive variety in the degree to which people are susceptible to rejection of particular social data. Kiriakos (2012) denoted that the responses vary because RS to some extent, is how much one anxiously anticipates, promptly comprehends, and overreacts to perceived rejection. Furthermore, based on attachment theory people withhold interior working models of their interpersonal relationships starting from their early childhood, which can influence their expectations about the outcome of social communications with others (Reilly, 2007). These models are also used to develop future anticipations about whether others will either fulfill their needs or reject them. Direct experiences of rejection or even expectations of rejection from important others such as parents, siblings, or friends are robust indicators of future relational onerousness (Derecho et al., 1996; London et al., 2007).

This study provided an instrument (adapted Yemeni version of the rejection sensitivity questionnaire) that is culture fare. For the purpose of making RSQ culturally fare the researcher deleted six items because they were concerned with dating which is forbidden and inappropriate for the Yemeni culture since Yemen is a conservative Muslim country. These six deleted items were replaced with another six items which are more appropriate for Yemeni culture. Furthermore, the researcher modified some words of several situations to make those situations more contextualized for the Yemeni environment and added three items tapping common situations in Yemen. The original RSQ was developed to measure rejection sensitivity for intimate relationships while the Y-RSQ is a modified version that can be used to measure rejection sensitivity in general. When Özen et al. (2011) adapted the RSQ for Turkish culture, they assumed that rejection expectancies may be culture specific, therefore they added eight items based on common Turkish situations. The total number of items of the Turkish version is 26. The German version of the RSQ was adapted by Staebler, Hellbing, Rosenbach, and Renneberg (2011) and it consists of 20 hypothetical situations in which rejection by others is possible.

This research emphasized the feasibility of applying the Y-RSQ among educational institutions since it is a valid and reliable measure, in order to measure students' rejection sensitivity to avoid its influence on students' ability to form healthy relationships and interact smoothly with others in their surroundings as well as avoid the possible impact of RS on their academic performance. This implication is in accordance with the earlier study by Kim (2015) in which he denoted that college students with high rejection sensitivity have appeared to exhibit a high propensity to repress their own feelings on account of fear of rejection, and this was a critical element for suicide-related incidents (Yu et al., 2016).



#### 5.4.2 Practical implications

It is simple to consider RS as a potential diagnosis with a certain set of symptoms that might contribute to the occurrence of different psychological disorders among Yemeni people especially due to the current conflicts and sensitive political, social and economic situation in Yemen. The conflict might lead people to exhibit different degrees of rejection sensitive propensities as was stated in past literature, for example, averting relationships, having difficulty in interacting and forming long-term relationships with others or interpreting rejection in ambiguous situations.

The findings of this study also have raised questions regarding the construct validity of the Y-RSQ in the current nonclinical Yemeni sample of university students, the Y-RSQ may appear unable to capture well the general dimensions of RS. In addition, RA and RE could bias people to quickly understand and firmly react to signs of rejection in various ways. Caution should, therefore, be used to interpret the results of those studies that utilized the RSQ, and to interpret the model of expectancy-value of anxious rejection expectations.

The findings of this study have serious implications for both rejection sensitivity research and social anxiety research, highlighting that RS may serve to stimulate dysfunctional cognitive processes that trigger social anxiety and other psychological disorder, which may be associated with individuals' reactions to rejection cues or the other way around. The current study has shown that the RSQ is positively correlated with the measure of social anxiety, in a sense, this suggests that the affective predispositions associated with RS may increase social anxiety and reactions to SR signs. Therefore, a further investigation is needed to study the nature of the relationship between these two variables among clinical and nonclinical samples

and also to see which variable influences the other. There may be avenues for reducing the effects of RS by targeting the cognitive or affective components of RS. It may be beneficial to develop strategies to reduce the anxiety felt when rejection is expected, to the researcher's knowledge, this study is considered the first study that has adapted and validated the RSQ for use among the Yemeni population that may encourage Yemeni and Arab researchers to highlight and conduct further studies on RS among Arabs from different aspects.

The current study offers an overview of RS by presenting a comprehensive literature review about the clinical symptoms accompanying RS, especially people with borderline symptoms, further psychological and mental disorders associated with elevated levels of RS such as subclinical levels of depression and anxiety spectrum, social anxiety, dissociation, aggressive behavior, friendship quality and parenting practices.

## **5.5 Research Recommendations**

Based on this study the researcher proposes recommendations in two parts. The first part is recommendations for the current study and the second part is recommendations for future studies that intend to study issues related to rejection sensitivity particularly among Yemenis, or among Arabs in general.

### **5.5.1 Recommendations for the present study**

This study has shown a preliminary support for the Y-RSQ as a valid and reliable measure for use in research with adult populations especially undergraduate students. Many additional, clinical and non-clinical applications for RS measurement with adequate psychometric properties have been suggested in the literature (Downey et al., 1998b; Feldman & Downey, 1994; Romero-Canyas et al.,

2010a). The results of this study suggest that the Y-RSQ has the potential to be a useful measure in evaluating how undergraduate students perceive, expect and react to SR when they interact or communicate with others. It also has some ability to reflect sensitivity to rejection among students. This measure may be applied as a measure of common symptoms of RS and some psychological disorders, both on psychopathology and normal life basis and social interventions intended to alleviate psychological disorders, and community-wide social problems. In other words, this measure could be added to the batteries of psychological tests that are used in psychological institutions.

#### 5.5.2 Recommendation for future studies

It is recommended to norm RSQ using a larger sample size to get a better model fit. Future studies could go beyond the validation of the RS questionnaire among adults from one city and try validating RSQ on adults from different provinces in Yemen to ensure the variability of the samples as well as the culture. It is also recommended to investigate RS on clinical samples who suffer from different psychological disorders. Researchers are encouraged to use random sampling by using diverse samples of adults from different age groups who have already graduated from university; in other words, to use samples in a general life setting not only academic life. Since this instrument was tested only on one public university in one governorate, the results can't be generalized to other universities in other districts without conducting further tests. Therefore, future studies should not be limited to only public universities but should include a large sample size from both private and public universities from different governorates in Yemen to increase the reliability and generalization of the findings.

In the current study, RSQ was validated by using criterion-related validity (concurrent validity) and construct validity (confirmatory factor analysis). Future studies could use different methods for validation other than those that were used in this study, such as convergent and discriminant validity and predictive validity. The current study was focused on the validation of the RSQ solely, and future studies are encouraged to investigate RS and its relationship with other factors; for example, various psychological disorders in the Yemeni culture and Arabs culture in general.

Considering that factor analysis does not appear to provide excellent model-fit indices for Y-RSQ, this study recommends a further study undertakes the interpretation and a comparison of a bifactor model with a one-factor model and a two-factor model before making a final decision regarding the assessment of model-fit. Also, further study is required to be conducted to improve the quality of the Y-RSQ (reliability and validity). For example, future studies could further modify the items. Though the Y-RSQ has been demonstrated to be valid and reliable, researchers still need to develop better ways to assess the variation in the students' responses. In addition, there is a need to contextualize the rejection sensitivity questionnaire to be used among adults in general not only students. Future studies should further investigate the factors that influence rejection sensitivity among adults in the Yemeni culture.

Further investigations on demographic differences might be undertaken in future studies (e.g., socioeconomic status differences, age differences, differences in academic rank, location (urban and rural areas), and family structure), also to acknowledge the likelihood that differences across colleges (campuses) and the other demographics which may influence the overall responses on the Y-RSQ and the

results. Thus, understanding these differences might help to capture the real picture of rejection sensitivity among Yemenis.

## **5.6 Conclusion of the Study**

The current study aimed to provide Yemeni scholars, councilors, and psychiatrists with a tool to assess RS, and to do so the researcher adapted the RSQ that was developed in the US and modified the questionnaire to be more suitable for the Yemeni culture. The adaptation and validation processes started by translating the questionnaire into Arabic, then the adapted Yemeni version was submitted to experts in psychology who are professional in English at the same time to check the content validity and the accuracy of the translation. In the method of criterion-related validity, the Y-RSQ was administered to a sample of 361 students to check the correlation between the Y-RSQ and social anxiety and the result of this stage demonstrated a significant positive relationship between the two measures. In the third stage of validation (construct validity) the confirmatory factor analysis for the Y-RSQ was run using the total sample (N= 571), and the results of this step showed acceptable model fit indices of the RSQ. The model of the RSQ was better represented by a bifactor model because the fit indices of the bifactor model were higher.

As a whole, the results of this study have shown that the Y-RSQ meets the main requirements for measurement instruments in social science and therefore, the Y-RSQ is suitable for application on the assessment of rejection sensitivity among students in the Yemeni context. Although items on the Y-RSQ have loaded significantly into their designated dimensions (rejection anxiety and rejection expectancy), the findings of this study suggest to the researcher to investigate further why the Y-RSQ resulted in acceptable fit indices in the current sample.

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