Identifying Gender Differences in Male and Female Anger Among an Adolescent Population

Isaac Burt

This pilot study explored differences between the levels of anger expression and anger control by adolescent males and females. Eighteen participants (9 males and 9 females) completed a strength-based anger management group promoting wellness. Anger management group counseling consisted of a 10-week continuous intervention emphasizing anger reduction, anger control and appropriate anger expression. Results indicated gender differences in that females exhibited more anger expression, as well as less anger control. However, females had higher levels of overall improvement. The article concludes with limitations and implications for mental health counseling with adolescent populations.

Keywords: mental health counseling, group counseling, anger management, adolescent, gender differences

The profession of mental health counseling serves a diverse population with a variety of needs, including substance abuse and anger management issues (Gutierrez & Hagedorn, 2013). In order to provide services to clients, mental health counselors use a number of modalities, such as individual and group counseling. Research indicates that group counseling in particular can be useful with certain populations, such as excessively angry clients (Burt, Patel, Butler, & Gonzalez, 2013; Fleckenstein & Horne, 2004). Traditionally, anger management groups have focused on dealing with anger after it occurs. Recent developments in the field of counseling, however, suggest that a number of new trends are developing with mental health and anger management groups (Burt & Butler, 2011).

One of these trends focuses on early prevention with mental health counselors either providing facilitation or training others to facilitate anger management groups in schools (Curtis, Van Horne, Robertson, & Karvonen, 2010). The targeted clients of most of the early prevention interventions are middle and high school populations (Parker & Bickmore, 2012). Burt and Butler (2011) contended, however, that many early prevention and anger management groups are gender biased and focus excessively on adolescent males. The researchers suggested that while adolescent females experience anger as well, they often do not receive counseling services (Burt & Butler, 2011). As a result, a growing population with similar needs is potentially neglected. While numerous differences do exist between genders, anger is a common emotion experienced by both (Karreman & Bekker, 2012).

Research indicates that differences exist between adolescent males and females with regard to behavioral decision-making processes and expression of emotions (Brandts & Garofalo, 2012). Although research depicts females as more emotionally expressive, males have a reputation of being more predisposed to anger. According to Sadeh, Javdani, Finy, and Verona (2011), females experience anger, but may express it differently than males. For example, instead of expressing anger by striking objects, adolescent females may talk to friends or
peers (Fischer & Evers, 2011). Conversely, other studies purport that females express anger similarly to males, but experience difficulty recognizing and admitting the emotion due to social expectations and constraints (Karreman & Bekker, 2012). Males, on the other hand, tend to display anger more commonly and comfortably (Fischer & Evers, 2011). One of the many reasons that adolescent males may feel comfortable expressing anger is because it is socially acceptable (Burt et al., 2013).

An extensive number of studies have investigated anger; however, there appears to be a lack of studies exploring anger differences between genders. Karreman and Bekker (2012) conducted a study on gender differences, investigating autonomy-connectedness between genders. Their study indicated differences related to anger and sensitivity between genders. However, the study did not attempt to determine whether males and females were equal in anger at the beginning or end of the study. Similarly, Burt, Patel, and Lewis (2012) reported that incorporating social and relational competencies into anger management groups reduced anger, but there was no discussion of anger differences between genders. Sadeh et al. (2011) indicated that women expressed more self-anger (i.e., anger directed internally toward themselves) than males, but did not investigate whether differences existed between genders before the study.

Although limited, a small number of studies have attempted to examine anger differences between genders. Similar to Sadeh et al. (2011), Fischer & Evers (2011) found that females expressed subjective anger, or self-anger, more often than males. Buntaine and Costenbader (1997) found that both genders’ self-reports (assessments) indicated no significant differences. Upon further examination of their data, however, they concluded that although self-reports specified no differences, males verbally reported higher responses of anger. In contrast, Zimprich and Mascherek (2012) determined that no anger differences existed between males and females. They declared that although genders may express anger and respond to situations differently, they generally experience similar levels of anger. As can be seen from the preceding studies, inconsistencies exist in the literature. Contradicting studies indicate that researchers are unclear as to whether differences in anger exist between genders. As such, a research gap has emerged that needs to be filled (Zimprich & Mascherek, 2012). In order to understand how this research gap developed, it is necessary to examine cultural influences.

Cultural Influences and Misconceptions in Society

According to Carney, Buttell, and Dutton (2007), a misconception exists in Western society that women are less aggressive than men and do not express excessive anger. This fallacy persisted in Western culture until a report from the U.S. National Family Violence Survey of 1975 (as cited in Carney et al., 2007) found a disturbing trend: Females were just as angry as males and expressed excessive anger the same amount that men did. At the time, feminist theory and the feminist movement were developing and stood in stark contrast to these findings. Carney et al. (2007) stated that as such, the National Family Violence Survey findings were largely unreported, and in extreme situations, people reinterpreted or repudiated the survey’s findings. In either case, more misconceptions began to develop in Western culture (Carney et al., 2007), such as the idea that when females experience anger, it is always appropriate to the situation (i.e., anger is permissible). A second mistaken belief is that anger from females is less serious and not as negative. For example, the expression “you look so cute when you’re angry” portrays this biased and potentially chauvinistic thought. A third misconception is that females are more credible in reporting their emotions and, as such, females are more reliable when they state that they are not angry.

Western society has acted upon these cultural misconceptions. For example, certain myths in society (and mental health counseling) persist, declaring the following: (a) only males have angry feelings, (b) all male-comprised counseling groups are anger management groups, (c) males have a limited repertoire of emotions
to express, (d) males are too angry and competitive to support one another in groups, and (e) males are not interested in meeting with other males (Andronico & Horne, 2004). Myths about female groups are that they are high functioning, conflicts are resolved faster, and a fair amount of reflection and processing exists (Gladding, 2012). According to researchers, these misconceptions can bias the truth regarding people’s beliefs. For example, Winstok (2011) stated that rates of excessive anger and intimate partner physical abuse among females equal or surpass those of males.

Clearly, cultural misconceptions of gender differences in excessive anger can lead mental health counselors to do a disservice to males and females alike. For example, culture can influence mental health and group counseling by causing a type to develop. This type is defined as best suited to be in anger management groups. As a result, mental health counselors may unconsciously choose more males than females to be members of anger management groups. Thus, a population that desperately needs services can go without an intervention (Carney et al., 2007). Mental health counselors need to reevaluate their thinking in order to avoid overlooking a population needing services due to implicit social misconceptions.

Bandura (2008a) believed that excessive anger was not sudden, but gradually manifested over time. His studies with youth corroborated this idea, as he observed modeling and negative behavioral patterns leads to excessive anger (Bandura, Ross, & Ross, 1963). Supporting Bandura’s work, Burt and Butler (2011) asserted that excessive anger begins in childhood and adolescence. They reinforced the notion that mental health counselors must be aware that both genders have common needs and issues. For females, not receiving services or having services denied, and being told that the emotion they feel is inappropriate, could cause personal damage (Gottfredson, 2002). For instance, society and mental health counselors often depict males as more in need of anger management (Burt & Butler, 2011). Conversely, mental health counselors sometimes neglect and ignore what females need (West-Olatunji et al., 2010). Stated succinctly, a gap exists between what clients need and the options mental health counseling interventions offer to both genders. It is the author’s contention that this gap is an unfair practice, as both genders have similar needs. Research has shown that males and females experience anger equally; as a result, both need anger management groups.

To determine whether both genders expressed anger similarly, the author implemented a pilot study with adolescents to explore the topic before proceeding with a full investigation. As Bandura (2008b) pointed out, anger begins early in life and timely prevention is critical. Provision of early services for children and adolescents can help to prevent issues later in life.

**Method**

**Participants**

Participants in this study were male and female middle school students in the sixth, seventh and eighth grades. Thirty potential participants (15 males and 15 females) received invitations for participation, and 20 returned signed parental informed consent forms (10 males and 10 females). Ages of participants ranged from 11–14 years and consisted of 75% Latino/Hispanic (15), 15% Black (3), and 10% White (2). Two participants did not complete the study.

**Instrumentation**

This pilot study used the State-Trait Anger Expression Inventory-2 Child and Adolescent (STAXI-2 C/A). A well-known and highly used instrument, the STAXI-2 C/A is a self-report assessment that indicates youths’ (ages 9–18) control and expression of their anger (Spielberger, 1999). The STAXI-2 C/A has provided reliable and consistent results across diverse cultures and settings (Chirichella-Besemer & Motta, 2008). The
STAXI-2 C/A contains four scales assessing excessive anger in youths. The four scales are as follows: Anger State (S-Ang), Anger Trait (T-Ang), Anger Control (AC) and Anger Expression (AX). Each of the four scales measures a different indicator of anger, in order to provide counselors with a multifaceted perspective of the client’s anger behavior.

Past studies that utilized the STAXI-2 C/A focused on AC and AX because of the strong validity these scales have with other anger assessments (Freeman, 2004); thus, the AC and AX scales were used in this pilot study. Cronbach’s alphas were .92 and .67 for AC and AX respectively (Freeman, 2004). Barrio, Aluja, and Spielberger (2004) stated that Cronbach’s alphas demonstrated by the STAXI-2 C/A indicated a high degree of reliability. Additionally, Barrio et al. (2004) also exhibited high construct validity by correlating the STAXI-2 C/A with the Verbal and Physical Aggressiveness Scale (AFV; Caprara & Pastorelli, 1993). A significant correlation of .43 existed between the two assessments. According to Gladding (2012), numerous counselors fail to measure the successfulness of their groups accurately because of errors in measurement and evaluation. In groups, a large number of therapeutic factors are occurring, which affect members in varying ways (Corey, 2011). Focusing on too many factors can overwhelm counselors and undermine evaluation, which is critically important (Gladding, 2012). In order to avoid this potential problem, this pilot study focused on a limited number of factors.

Procedures

A large, urban public middle school in a metropolitan area provided the setting and participants for this pilot study. Serving 2,000 students in grades 6–8, the school has a standardized documentation system that keeps track of behavioral disruptions. The documentation system records in-school suspensions (ISS), out-of-school suspensions (OSS) and behavioral infractions for students (Burt, 2010). Each student has a personal identification number; the administration connects student infractions to these numbers in order to identify any student. The documentation system also contains a small description of what caused the issue. For instance, some students have behavioral outbursts of anger, while others have infractions for tardiness. Since the focus of this pilot was to determine anger differences between genders, it was imperative for the study to have participants who displayed excessive anger. To increase validity and correctly identify participants, the author used school administration recommendations.

The author conducted interviews with school staff to gather information as suggested by Bryan, Day-Vines, Griffin, and Moore-Thomas (2012). For example, the author asked school deans, teachers and professional school counselors (PSC) for recommendations about students. Many students had a high overall number of OSS and ISS, including a large number of behavioral infractions. However, some infractions were due to nonexcessive anger problems (e.g., tardiness). School staff could provide a safeguard against the author inappropriately recruiting a student who did not truly require services. The author asked school staff if a student’s number of OSS, ISS and infractions corresponded with actual behavior (i.e., excessive anger). Thus, the goal was to eliminate as much bias as possible to ensure the most appropriate candidates.

After interviewing school staff, a pool of candidates emerged, consisting of individuals with documentation of excessive anger, fights and legal procedures in the court system (Burt, 2010). School staff considered these candidates to be at high risk for excessive anger, and candidates’ records of OSS, ISS and behavioral infractions corroborated this belief. According to Burt et al. (2013), more than eight occurrences in a 12-week period constitute a high number of anger issues; thus, this study held the same parameters advocated by Burt et al. (2013). Once a list of eligible candidates emerged, the author interviewed school staff a second time. This second short interview was a safeguard measure before actually contacting candidates. The author wanted to meet with school staff again to reduce potential staff bias and ensure that candidates were still having anger issues. After the last interview, school staff explained the study to candidates in detail.
In order to increase client buy-in, school staff introduced the author of this article (who was also the group facilitator) to candidates. The author met with candidates and explained the study in more detail, in addition to answering any questions. If the candidates were interested in participating, the author gave them informed consent forms to have their parents sign. To increase the likelihood of the candidates returning the informed consent forms, candidates received tokens from the school, which allowed them to buy goods in the school store. If candidates returned signed informed consent forms, they received five tokens, comparable to five U.S. dollars. Out of 30 candidates, 20 returned signed informed consent forms. Although this is a small number, this quantity is permissible for pilot studies (Heppner, Wampold, & Kivlighan, 2008). The author split the participants in half based on gender (10 males and 10 females). One participant dropped out of each group, leaving 18 who completed the study. Each group met at a different time and was not aware of the existence of the other group (Burt, 2010). This pilot study assessed participants’ behavior via the STAXI-2 C/A, given pre- and post-intervention.

**Structure of the intervention/anger management group used in the pilot study.** The anger management group consisted of eight counseling sessions and two assessment sessions (pretest and posttest assessment; Burt, 2010). Program duration was 10 weeks, and the author of this article conducted each session weekly. Corresponding with Blanton, Christensen, and Shakir (2006), each counseling session contained the following four essential components: an opening question (such as an icebreaker or introductory segment), a behavioral lesson (information gathering and learning), a behavioral activity (an experiential segment in which learned information is applied), and an appreciations and closings segment ending the group (a bonding piece for group members). Counseling sessions concluded after 60 minutes, with opening questions lasting approximately 5–10 minutes. Behavioral lessons took between 10 and 25 minutes and behavioral activities lasted 15–30 minutes. Appreciations and closing concluded after 5–10 minutes. Pre- and post-group paperwork sessions took approximately 15–30 minutes (Burt, 2010). As Burt et al. (2012) suggested, groups must be strength-based (i.e., accentuating members’ strong points), and incorporate collaboration and teamwork. The group was prosocial in nature, emphasized clients’ strengths and developed social bonding. Topics for the eight sessions included the following: improving communication skills, recognizing personal emotions, identifying emotions within others, improving observational skills, advanced detection of emotions in others, noticing anger cues in others, understanding personal anger cues, strategies for calming down, and problem-solving.

**Mental health counselor for the intervention.** The mental health counselor for both groups was this author, who has experience as a group facilitator and counselor educator. Additionally, the author worked as a training liaison for anger management groups in the school system, teaching conflict resolution and peer mediation. He also has experience working with groups for adults and children with oppositional defiance disorder and anger management issues. The group facilitator used an integrative orientation, utilizing social cognitive theory (SCT) and cognitive-behavioral therapy (CBT; Burt, 2010).

**Results**

The focus of the study was to determine whether differences existed between male and female levels of excessive aggression. Table 1 displays descriptive statistics and indicates results from the one-way repeated measures ANOVA for AC and AX. Results for youths’ overall AC levels pre- and post-intervention indicated the following, \( F_1, 8 = 6.36, p = .003, ES = .44 \). Thus, the pilot study showed preliminary findings that a significant difference existed between genders on AC. For the scale of AX, results indicated a statistically significant difference between genders pre- and post-intervention (\( F_1, 8 = 4.06, p = .018, ES = .34 \)). Although repeated measures indicated a statistically significant difference between genders, pair-wise comparisons
allowed examination of exactly where differences lay between genders on AC and AX. Thus, a significant difference existed between gender on AC ($p = .04$), and on AX (.03; Table 1). At the beginning of the pilot study, males had less AC, but females had more AX. However, females had the larger increase in AC post-intervention, as well as the greatest reduction in AX between genders. Hence, females had the greater overall gains and improvement pre- and post-intervention as opposed to males.

**Table 1**

*Outcome results for Anger Control and Anger Expression*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th>Males</th>
<th>females</th>
<th>df</th>
<th>$P$</th>
<th>$F$</th>
<th>ES</th>
<th>Posttest</th>
<th>Males</th>
<th>females</th>
<th>df</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeated Measures ANOVA$^a$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger Control</td>
<td></td>
<td></td>
<td>44.22</td>
<td>51.56</td>
<td>8</td>
<td>.003</td>
<td>6.36</td>
<td>.44</td>
<td>50.00</td>
<td>63.33</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12.76)</td>
<td>(4.33)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(14.00)</td>
<td>(7.85)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger Expression</td>
<td></td>
<td></td>
<td>18.78</td>
<td>24.67</td>
<td>8</td>
<td>.018</td>
<td>4.06</td>
<td>.34</td>
<td>17.44</td>
<td>20.67</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5.58)</td>
<td>(3.87)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(5.50)</td>
<td>(2.74)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair-Wise Comparisons$^b$</td>
<td></td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* $^a N = 9$ $^b N = 18$

**Discussion**

Females had more AX than males, a finding which corresponds with Cross and Campbell (2011). Males appeared to have less AC and were somewhat less angry than females. A number of studies support the preceding findings, most notably Winstok (2011) and Carney et al. (2007). Further, this pilot’s findings corroborate the idea that both genders have equal problems with excessive anger (Carney et al., 2007). The results from this study also suggest that both genders can improve with interventions designed to address anger. According to Winstok (2011), a common misconception is that males have greater need for excessive anger interventions than females. However, in this pilot study, females responded better to the treatment than males did. This responsiveness to treatment is interesting in that few studies have directly compared sensitivity to interventions by gender. While sensitivity to treatment was not a focal point of this pilot, it is interesting to note and direct attention to this unexpected outcome.

The author believes that the primary underlying reason females responded better to the treatment is that they are an underserved population (West-Olatunji et al., 2010). This is not to say that other explanations are not contributing factors, but because the females in this study possibly represent an underserved population, the aforementioned factor likely has more influence. According to West-Olatunji (2010), an underserved population is one that needs services, but does not have access to help. In addition, a number of the females in this pilot qualify as an underserved population as defined by Burt and Butler (2011). For instance, background information provided by the school indicated that approximately 85% of males in this pilot study received prior services (e.g., counseling) before participating. Conversely, 40% of females in this pilot study received prior services. Although the purpose of this study was not to detail what causes an underserved population to develop, research indicates that it can be due to institutional, social or cultural constraints (West-Olatunji et al., 2010).
While this study did not use qualitative measures as advocated by McCarthy (2012), females verbally disclosed that the school rarely offers them anger management services. Female participants further stated that if those services were more readily available, they would use them. Conversely, males indicated being overwhelmed with staff attempting to persuade them to participate in anger management services. This dichotomy in access to treatment clearly marks the identification of an underserved population. Thus, the females’ higher responsiveness to the intervention is potentially due to the following: Perhaps this study was a first intervention for many of the female participants. For females who did receive prior services, it may have been the first intervention directly dealing with anger.

Day (2008) indicated three characteristics that clients need to increase the likelihood of a successful outcome: the client must be in distress, must actively seek help and must have high expectations for counseling. The female participants (as opposed to the majority of the males) in this study met the preceding three criteria. Members of both genders were in a state of distress (as evidenced by the school’s documentation system). However, females verbally admitted to wanting help and had higher expectations. Consequently, females in the pilot had larger, more consistent gains. As evidenced by West-Olatunji et al. (2010), when underserved populations receive desired treatments, the change is normally larger than average. Thus, the findings in this pilot study connect to previous research and provide a plausible reason for the differences between genders.

Limitations
This pilot study had limitations stemming from research methods. First, the groups were limited to one school, as well as to selection from a standardized school documentation system (Burt, 2010). The documentation system compiled an objective list of behavior issues in school, but did not differentiate between excessively angry and nonexcessively angry behaviors. For example, documented behaviors could range from threatening school staff to not returning school forms promptly. To account for this issue, this study included school staff and administration’s professional suggestions for possible candidates. However, school staff may have had subtle biases for or against certain students. There are limitations to each method of selection, including both the standardized documentation system and the school staff. An additional limitation is that the same mental health counselor (the author of this article) conducted the groups. Due to this limitation, some participants’ changes may be due to the facilitator’s style or personality. More importantly, this study lacked a control group and had a small number of participants. The lack of a control group makes generalizations difficult in that it is uncertain whether other extraneous variables influenced the results. Having a small number of participants decreases the power of the pilot study and makes it difficult to generalize results. However, the fact that a significant finding occurred with a small sample size indicates the strong influence of the intervention (Gay & Airasian, 2003). In schools, it is difficult to conduct full-scale studies due to a number of preexisting conditions, such as high-stakes testing (Burt et al., 2013). Therefore, having a study without a control group and with a small number of participants may be the most appropriate method if investigators are to conduct research in schools (Heppner et al., 2008).

Implications and Future Directions for Research
Implications for mental health counselors stemming from this pilot study are numerous. First, mental health counselors must be aware that both genders need services for excessive anger. Mental health counselors should not allow personal biases and media influences to sway professional opinion (Gladding, 2012). In addition, mental health counselors must advocate for fairness and oppose stereotyped biases and ideologies pushed by society (Burt et al., 2012). According to Gray and Rose (2012), discrimination and internalized oppression begin by ignoring discriminatory societal practices. Only by remaining reflective and cognizant of personal
biases can mental health counselors reduce problematic issues and model appropriate behaviors (Young, 2012).

A second implication for mental health counselors is to understand that a strength-based model promoting wellness is critically important for clients (Hagedorn & Hirshhorn, 2009). Specific populations, such as youth, respond better to models incorporating empowerment, which can lead to increased behavioral self-efficacy (Bandura, 2008a). Furthermore, positive modeling by mental health counselors also increases growth and behavioral self-efficacy (Bandura, 2008a). A combination of strength-based approaches, empowerment and modeling improve groups’ interpersonal, intrapersonal and extrapersonal functioning (Gladding, 2012). Third, mental health counselors should seek to improve delivery of services and outcomes by evaluating the group process (Steen, 2011). For instance, Gladding (2012) and McCarthy (2012) reinforced the notion of improving counseling services through research and evaluation. This study provided a formal assessment of a group that could have otherwise gone unreported.

Future researchers may want to improve the overall research design. For example, researchers could include a larger number of participants, groups and multiple facilitators. Moreover, future studies must have a true experimental design, such as a control group with random assignment. Including participants’ personal perspectives and phenomenological views not only increases the validity of research, it improves mental health counselors’ skill levels as well (Gladding, 2012). Qualitative measures improve skill level by giving mental health counselors a clear idea of what actually worked and what did not (Burt & Butler, 2011). Lastly, future researchers may want to pay more attention to gender responsiveness (sensitivity) to treatments, to determine if males or females respond better to specific treatments.

**Conclusion**

The purpose of this pilot study was to determine whether gender differences existed among adolescents for excessive anger. Preliminary results indicate that differences existed, but that there also were distinctions between genders regarding the intervention itself. Females had better AC, but also had more AX compared to their male counterparts. However, females seemed to respond better to the intervention, as shown by their larger gains and improvement. Males improved as well, but did not have the substantial progress observed in females. While past research may not have lent strong support for gender differences, this author hoped to reinvigorate interest in gender discrepancies. Females are an underserved population with regard to anger management; research has indicated that they experience anger sometimes at a rate paralleling or surpassing males (Cross & Campbell, 2011). However, due to societal stigma and cultural biases, many females do not receive anger management services. Therefore, only rigorous research can determine whether these problems truly exist by improving group research and outcomes (McCarthy, 2012).

**Conflict of Interest and Funding Disclosure**

The author reported no conflict of interest or funding contributions for the development of this manuscript.

**References**


Gay, L. R., & Airasian, P. (2003). Educational research: Competencies for analysis and applications (7th ed.). Upper
Saddle River, NJ: Merrill/Prentice Hall.


